

A COLLECTION OF BIRDS FROM THE PROVINCES OF  
YUNNAN AND SZECHWAN, CHINA, MADE FOR THE  
NATIONAL GEOGRAPHIC SOCIETY BY DR. JOSEPH F.  
ROCK

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During explorations for the National Geographic Society in southwestern China Dr. Joseph F. Rock, in connection with other collections in natural history, took advantage of the opportunity to secure an excellent series of birds, which, upon his return, were presented with other material by the National Geographic Society to the United States National Museum. The collection is remarkably complete in that it includes skins of most of the larger forms which few collectors trouble to prepare, particularly when traveling under difficult conditions, as in the present case. The specimens received, all beautifully prepared by native workmen, are a distinct addition to the division of birds in that they constitute one of the largest accessions of recent years and that they represent an area from which we had practically no material previously. Among them are species hitherto unknown to science, as well as an excellent representation of birds described from previous expeditions and rare in museums, since they are restricted in range to this area, a region difficult of access. Doctor Rock is to be complimented upon his energy and interest in procuring so excellent a representation.

Doctor Rock began his ornithological work in Yunnan early in March, 1923, in the vicinity of Tengyueh, near the Burma border, and started northeast for the Likiang Snow Mountains, which were reached early in April. Here he worked in the mountains or surrounding plains until September, when he went northwest to the valley of the Mekong in northwestern Yunnan to collect during October and November on various ranges of mountains between the Yangtze and Mekong. Most of these ranges are nearer the Mekong than they are to the Yangtze, except the Litiping Mountains, which form the divide between the two streams and are about midway between them, just north of where the Yangtze turns abruptly north

to form the big bend shown on maps. These various ranges must be of considerable height, though the altitudes from available information are uncertain. At one point there was taken a new species of blood pheasant (*Ithaginis*), a group that is only found at considerable elevations. From the valley of the Mekong, Rock turned east again and collected for a short while on the plain of Youngning, just east of the big bend of the Yangtze, and then crossed over into the southwest Szechwan to visit in the latter part of February, 1924, the independent lama kingdom of Muli or Mili on the Litang River. This was the only work done outside of Yunnan and ended the collection of birds for the trip.

The result of the year's bird collecting was something over 1,600 excellent skins, which were splendidly packed and reached their destination in Washington in fine shape.

Doctor Rock has issued<sup>1</sup> two beautifully illustrated articles dealing with the country traversed. A small map that he has published of the northern part of the territory explored indicates most of the localities mentioned in the following report.

Three birds in this collection have turned out to be apparently unnamed.<sup>2</sup> The collection as at present worked out contains 244 forms, which is a remarkable showing for a collector busied largely in the procuring of plants.

J. D. La Touche has published<sup>3</sup> an account of a collection made by himself in southeast Yunnan, wherein is given a list of the important papers on the ornithology of the Province, which need not be repeated here. Since his paper was written three large additional collections have been received by the Tring Museum and reported upon by Lord Rothschild.<sup>4</sup> The birds collected by the Stötzner expedition have been worked out at the Dresden Museum by various specialists,<sup>5</sup> but only the early parts of the report had reached the United States when this manuscript was completed. The route on this last expedition seems to have been more to the north through Szechwan. The two volumes of the Fauna of British India, Birds, second edition, by Stuart Baker, so far published completes the list of important ornithological papers and works on this part of China in recent years.

The present list is published as a record of the fine collection made by Doctor Rock, trusting it may add something of interest to the distribution and taxonomy of the birds of this part of China, as yet

<sup>1</sup> National Geographic Magazine, vol. 46, 1924, pp. 473-499; vol. 47, 1925, pp. 447-492; also consult Gilbert Grosvenor, idem, vol. 47, 1925, pp. 493-498.

<sup>2</sup> *Ithaginis rocki* and *Strix aluco nivipetens* Riley, Proc. Biol. Soc. Wash., vol. 38, 1925, pp. 9-12; and *Luscinia davidi gloriosa* Suschkin, "Auk," vol. 43, April, 1926, pp. 181-183.

<sup>3</sup> Ibis, 1923, pp. 300-332, 369-415, 629-645, 1924, pp. 284-307.

<sup>4</sup> Nov. Zool., vol. 30, 1923, pp. 33-58, 247-267; vol. 32, 1925, pp. 292-313.

<sup>5</sup> Vorwort: Abhandl. u. Berichte des Zool. u. Auth.-Ethn. Museums zu Dresden, vol. 15, 1922, pp. iii-viii, and in following volumes.

none too well known. I have made my remarks on the forms brief, only adding such notes as will be of use to future workers in the same general region.

I am indebted to Outram Bangs for the identification of three species of the following list.

#### ANNOTATED LIST

### Family PHASIANIDAE. Pheasants, etc.

#### 1. TETRAOPHISIS SZECHENYII Madarasz

*Tetraophasis szechenyii* MADARASZ, Zeitschr. f. ges. Orn., vol. 2, 1885, p. 50, pl. 2 (East Tibet).

One male, Likiang Mountains, 16,000 feet, June 14; one male and one female, Mount Dyinaloko, 13,000 feet, Abies forest, June; one male and two females, Hofuping Mountains, Mekong Valley, November.

#### 2. COTURNIX COTURNIX JAPONICA Temminck and Schlegel

*Coturnix vulgaris japonica* TEMMINCK and SCHLEGEL, Fauna Japon. Aves, 1849, p. 103, pl. 61 (Japan).

One adult female, Likiang Plain at Pöshaka, 8,500 feet, August. A dark richly colored bird.

#### 3. ITHAGINIS CLARKEI Rothschild

*Ithaginis clarkei* ROTHSCHILD, Bull. Brit. Orn. Club, vol. 40, 1920, p. 67 (Likiang Range, Yunnan).

Four males and one female, Likiang Mountains, 13,000 feet, May-June.

Not one of the males is exactly alike. Only one lacks red on the throat and chest, though in one of the others the red on the chest is much reduced. In one male the throat and chin is pronouncedly tinged with red, and it even extends onto the cheeks. All the males have the chest tinged more or less, with cinnamon-buff and in three the forenecks and throats also. The male with the throat and cheeks strongly tinged with red approaches *Ithaginis rocki*, but the bill is larger, the crest longer and more decomposed, the forehead black, and the cere (in the skin) red. The red of the throat is deeper and more restricted and that of the chest reduced to more or less of a trace and the cinnamon streaks on the foreneck and chest intensified in *Ithaginis clarkei* also. The only male of *Ithaginis geoffroyi* available for comparison has much less red on the under tail coverts than any of the specimens of *Ithaginis clarkei* before me, but the specimen of the latter without any red on the throat or chest is similar.

The male of *Ithaginis clarkei* has a larger, heavier bill than *Ithaginis rocki*, and the cere and bare skin around the eye is red in the skin (cream buff in *rocki*). The bill and cere is dull black in the

female of *Ithaginis clarkei* (in the skin); red with only the cere and extreme base blackish in *Ithaginis rocki*.

Rothschild<sup>6</sup> reduces *Ithaginis clarkei* to a race of *Ithaginis geoffroyi*, but *Ithaginis rocki* is a connecting link to *Ithaginis cruentus*, so it would seem that even *Ithaginis geoffroyi* would have to be reduced to a race of that species or treat them all binomially; I have adopted the latter course for the present.

#### 4. ITHAGINIS ROCKI Riley

*Ithaginis rocki* RILEY, Proc. Biol. Soc. Wash., vol. 38, 1925, p. 9 (Hofuping Mountains, Mekong Valley, Yunnan).

Three males and three females, Hofuping Mountains, Mekong Valley, November.

Similar to *Ithaginis kuseri* Beebe, but ear coverts broadly streaked with grayish-white and the lores black not red.

There are no specimens of *I. kuseri* available for comparison. I have had to rely upon descriptions and the plate of the head given by Stuart Baker.<sup>7</sup> The above birds do not fit the descriptions or the plate, and as there did not appear to be any described form to which they could be referred, I named it after its discoverer.

One of the specimens marked as a female has the bill black, only red at the base of the lower mandible. In my opinion it is a young male, as the tarsi are heavier than in the female and have a budding spur. The female resembles the females of *Ithaginis clarkei* Rothschild, but the hind neck is not so extensively neutral gray; the forehead, cheeks, and throat are cinnamon-rufous, not tawny-olive; and the bills are smaller and red, only black basally, not wholly so.

The birds of this genus are residents of high mountain regions and seem incapable of crossing hot valleys. It would appear as if every isolated high-mountain mass within the range of the genus that had been sufficiently long uplifted might have its own local race. When the same form occurs upon two or more disconnected mountain ranges it tends to show that at one time there must have been a connection and that they are near the same geologic age. The distribution and relationships of the various forms are too imperfectly known as yet for any one to dogmatize.

#### 5. TRAGOPAN TEMMINCKII (Gray)

*Satyra temminckii*, J. E. GRAY, Ill. Ind. Zool., vol. 1, 1830-32, pl. 50 (China).

Three adult males, four immature males, four females, and one downy young from Mount Dyinaloko, 12,000 feet, April 27; Likiang Mountains, July; Hofuping Mountains, November.

<sup>6</sup> Nov. Zool., vol. 30, 1923, p. 247.

<sup>7</sup> Ibis, 1915, pl. 3, fig. 3.



The downy chick was taken in July.

One of the adult males has the neck lappet and horns enormously developed (April 27).

#### 6. CROSSOPTILON CROSSOPTILON CROSSOPTILON (Hodgson)

*Phasianus crossoptilon* HODGSON, Journ. Asiatic Soc. Bengal, vol. 7, 1838, p. 864, pl. 46 (Tibet).

One male, Likiang Mountains, 14,000 feet, August 16.

Doctor Rock informs me that this species was quite common at high altitudes; so common in fact that he thought it must be better known and only had the one bird preserved.

#### 7. PHASIANUS ELEGANS Elliot

*Phasianus elegans* ELLIOT, Ann. and Mag. Nat. Hist., ser. 4, vol. 6, 1870, p. 312 (Szechwan).

A good series of adults of both sexes and young from near Tsaochiang, March 19; Likiang Mountains, 10,000 feet June-August; Likiang Plain, east of Likiang Mountains, July 2; Ashi, banks of Yangtze, July; Kangpu Mountains, Mekong Valley, November.

Downy young just acquiring feathers on the back and in the wings were taken in the Likiang Mountains in July, and almost in adult plumage in August.

Two adult males from Tatsienlu, Szechwan, are not essentially different and in none of the males is there any indication of a white collar.

#### 8. CHRYSOLOPHUS AMHERSTIAE (Leadbeater)

*Phasianus amherstiae* LEADBEATER, Trans. Linn. Soc. Lond., vol. 16, 1828, p. 129, pl. 15 (Mountains of Cochinchina).

A fine series of adults and immature from Likiang Mountains, 9,500–12,500 feet, April-June; Tseh Chung, Chödölo, Hofuping, and Yangtza Mountains, Mekong Valley, November.

A few of the old males have the thighs white with only a few small black spots: in the remainder the spots are numerous and pronounced.

### Family TRERONIDAE. Fruit Pigeons

#### 9. SPHENURUS SPHENURUS YUNNANENSIS La Touche

*Sphenocercus sphenurus yunnanensis* LA TOUCHE, Bull. Brit. Orn. Club, vol. 42, 1921, p. 13 (Lotukow, S. E. Yunnan).

A good series of adults, mostly males, from: Western slopes of Likiang Mountains, Ashi Road, May 24; east slopes of Likiang Mountains, Lentzuko, July; banks of the Yangtze, Ashi Road, July.

The series of males show little variation, but I only have one specimen of *Sphenurus s. sphenurus* for comparison. Rothschild<sup>8</sup>

<sup>8</sup> Nov. Zool., vol. 30, 1923, p. 36.

says the edgings to the secondaries are wider and more numerous in *S. s. yunnanensis*, but in the present series these are very narrow and rather inconspicuous; the other differences mentioned by him seem to hold and if our specimen of *S. s. sphenurus* is typical there are other differences. The upper back is distinctly neutral gray; the rump, middle tail feathers, and inner remiges not so yellowish green; the under tail coverts a deeper cinnamon-buff; and there are other slight differences.

### Family COLUMBIDAE. Pigeons and Doves

#### 10. COLUMBA LEUCONOTA LEUCONOTA Vigors

*Columba leuconota* VIGORS, Proc. Zool. Soc. Lond., 1831, p. 23 (Himalaya).

Two males and two females, mountains near Yangtza, November.

Two males from Kashmir have darker heads and browner mantles when compared with the Yunnan birds.

A series of five males and one female recently received from near Tatsienlu, Szechwan, are much lighter on the mantle than the Yunnan birds, and evidently belong to *Columba leuconota gradaria* Hartert.<sup>9</sup>

#### 11. COLUMBIA HODGSONI Vigors

*Columba hodgsoni* VIGORS, Proc. Zool. Soc. Lond., 1832, p. 16 (Nepal).

Two males, Likiang Mountains, 13,000 feet, May 10; one male, Ngaza, June.

### Family RALLIDAE. Rails, Gallinules, and Coots

#### 12. PORZANA BICOLOR Walden

*Porzana bicolor* WALDEN, Ann. and Mag. Nat. Hist., ser. 4, vol. 9, 1872, p. 47 (Sikkim).

One male, Likiang Plain near Lungwangmiao, 8,200 feet, August 22; two males and one female, Likiang Plain, August; one male and one female, Lanping Plain, 8,400 feet, June 3.

I have no typical specimens for comparison. The above series differ somewhat from Sharpe's description.<sup>10</sup>

The primaries are not externally rufescent brown but fuscous, and the under tail coverts are blackish.

#### 13. GALLINULA CHLOROPUS PARVIFRONS Blyth

*Gallinula parvifrons* BLYTH, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 180 (Calcutta).

One male and one female, Chienchuan, May 29; one male and one female, Likiang Lake, 8,200 feet, August.

<sup>9</sup> Nov. Zool., 1916, p. 85.

<sup>10</sup> Cat. Birds Brit. Mus., vol. 23, p. 113.

## Family PODICIPIDAE. Grebes

## 14. POLIOCEPHALUS RUFICOLLIS POGGEI (Reichenow)

*Podiceps nigricans poggei* REICHENOW, Journ. f. Orn., 1902, p. 125 (Tschill, China).

One adult male, two adult females, and four young (one in the down), Likiang Lake, 8,200 feet, August.

## Family LARIDAE. Gulls

## 15. LARUS CANUS MAJOR Middendorff

*Larus canus*, var. *major* MIDDENDORFF, Sibir. Reise, Zool., vol. 2, pt. 2, 1853, p. 243, pl. 24, fig. 4 (Stanovoi Mts. to Ochotsch Sea).

One immature male, plain of Youngning, February.

## Family CHARADRIIDAE. Plovers

## 16. CHARADRIUS DUBIUS DUBIUS Scopoli

*Charadrius (dubius)* SCOPOLI, Del. Flor. et Faun. Insubr., vol. 2, 1786, p. 93 (Luzon).

One female, without data.

## 17. CHARADRIUS PLACIDUS Gray

*Charadrius placidus* GRAY, Cat. Mamm. etc. Nepal present. Hodgson, ed. 2, 1863, p. 70 (Nepal).

One male, Yetché, Mekong Valley, November; one male, without locality, March 26.

## Family IBIDORHYNCHIDAE. Sickle-bills

## 18. IBIDORHYNCHA STRUTHERSII Vigors

*Ibidorhyncha struthersii*, VIGORS, Proc. Zool. Soc. Lond., 1830, p. 174 (Himalayan Mountains).

One male, Whei Hsi Mountains, Whei Hsi River, November.

## Family SCOLOPACIDAE. Snipe and Sandpipers

## 19. TRINGA OCHROPUS Linnaeus

*Tringa ochropus* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 149 (Sweden).

Two males and seven females from Nguluko, Likiang Mountains, 9,600 feet, May 5; Likiang Plain, 8,200 feet, August; Whei Hsi River, December.

## 20. ACTITIS HYPOLEUCUS (Linnaeus)

*Tringa hypoleucos* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 149 (Sweden).

One male and one female, Likiang Plain, 8,200 feet, August; one male, Mountains above Tseh Chung, Mekong Valley, October; one male, Whei Hsi, Mekong Valley, October; one female, no locality.

## 21. RHYACOPHILUS GLAREOLA (Linnaeus)

*Tringa glareola* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 149 (Sweden).

One male, Likiang Plain, 8,200 feet, August.

## 22. CAPELLA SOLITARIA (Hodgson)

*Gallinago solitaria* HODGSON, Gleanings in Science, vol. 3, 1831, p. 238 (Nepal).

One female, Luanko-Dyinaloko, 11,000 feet, April 27; one male and one unsexed, near Whei Hsi, November; one female, Heshwe, Likiang Mountains, 12,000 feet, February.

## Family ARDEIDAE. Herons

## 23. ARDEA CINEREA JOUYI Clark

*Ardea cinerea jouyi* CLARK, Proc. U. S. Nat. Mus., vol. 32, 1907, p. 468 (Seoul, Korea).

One male, foot of Likiang Mountains, 9,300 feet, September.

## 24. NYCTICORAX NYCTICORAX NYCTICORAX (Linnaeus)

*Ardea nycticorax* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 142 (S. Europe).

One immature male, Likiang Plain, 8,200 feet, August.

## 25. BUTORIDES JAVANICA JAVANICA (Horsfield)

*Ardea javanica* HORSFIELD, Trans. Linn. Soc. Lond., vol. 13, 1821, p. 190 (Java).

Two males and one female, between Tuinakou and Likiang, Likiang Plain, May 18; four males and two females, Likiang Plain, 8,200 feet, August.

Only one specimen is adult, May 18, and even this one is in not fully adult plumage; the wing coverts and inner remiges are broadly bordered with sayal brown and pinkish cinnamon.

## 26. ARDEOLA BACCHUS (Bonaparte)

*Buphus bacchus* BONAPARTE, Cons. Gen. Av., vol. 2, 1855, p. 127 (Malay Peninsula).

One adult male, five immature males, and two immature females, Likiang Plain, 8,200 feet, August 18-20; one immature female, Likiang Mountains, 10,000 feet, September.

## Family ANATIDAE. Ducks, etc.

## 27. CASARCA FERRUGINEA (Pallas)

*Anas (ferruginea)* PALLAS, Vroeg's Catal., 1764, Adumbr., p. 5 (Tartary).

One female, Kanhoten, March 27; one female, Likiang Mountains, 11,000 feet, June.

28. *ANAS POECILORHYNCHA HARINGTONI* (Oates)

*Polionetta haringtoni* OATES, Journ. Bombay Nat. Hist. Soc., vol. 17, 1907, p. 558 (Shan States).

One adult female and two downy young, Likiang Lake, 8,200 feet, August 20.

I have no specimens of *A. p. poecilorhyncha* or typical *A. p. haringtoni* for comparison, but have a good series from western Szechwan and five specimens of *A. p. zonorhyncha* from Japan and eastern China. The Szechwan specimens vary quite a little, but are not quite the same as the coast birds; the feathers of the back are more broadly edged with buffy as a rule, and the subterminal white bar on the greater wing coverts is broader and more pronounced. In fact, this white wing bar is only reduced or lacking in 3 out of 12 specimens, while in the others it is very noticeable, being as much as 10 mm. broad. The single female listed above from Yunnan agrees with those from Szechwan. As a matter of fact, the present race seems to be an intergrade between *A. p. poecilorhyncha* and *A. p. zonorhyncha*.

29. *NETTION CRECCA* (Linnaeus)

*Anas crecca* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 125 (Europe).

One female, near Kanhoten, March 29; one female, Nguluko, April 13.

30. *MERGUS MERGANSER MERGANSER* Linnaeus

*Mergus merganser* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 129 (Europe).

One female, Whei Hsi River, November; one female, Yangtze River at Chütien, November.

Both of these are marked as males, but apparently incorrectly so. They belong to the large, thick-billed form.

31. *MERGUS MERGANSER ORIENTALIS* Gould

*Mergus orientalis* GOULD, Proc. Zool. Soc. Lond., 1845, p. 1 (Amoy, China).

One female, between Tanten and Ssuehing, March 24; one female, Yangtze River at Chütien, November.

These are small, narrow-billed birds. The exposed culmens measure: 44.5 and 44 mm., respectively.

## Family PHALACROCORACIDAE. Cormorants

32. *PHALACROCORAX CARBO SINENSIS* (Shaw and Nodder)

*Pelecanus sinensis* SHAW and NODDER, Nat. Misc., vol. 13, pl. 529, text 1801 (China).

One adult female still retaining the breeding plumage, Likiang Lake, August.



## Family FALCONIDAE. Hawks, etc.

## 33. CIRCUS CYANEUS CYANEUS (Linnaeus)

*Falco cyaneus* LINNAEUS, Sys. Nat., ed. 12, 1766, p. 126 (ex Edwards—London).

One immature male, Plain of Youngning, February.

## 34. ACCIPITER NISUS MELANOCHISTUS Hume

*Accipiter melanochistus* HUME, Ibis, 1869, p. 356 (Simla).

One immature male, Tseh Chung Mountains, Mekong Valley, November; one immature male and female, near Youngning, February.

## 35. BUTEO BUTEO JAPONICUS (Temminck and Schlegel)

*Falco buteo japonicus* TEMMINCK and SCHLEGEL, Fauna Japon. Aves, p. 16, 1844, pl. 6 and 6b, 1845 (Japan).

One male and one female, Chienchuan Plain, March 30; one male, Youngning Plain, February.

The above specimens illustrate three phases of plumage. The female has the chest cinnamon, the breast sepia with rusty and white markings, the thighs russet with a few faint buffy bars. The male taken March 30 has the thighs light seal brown and the chest muck streaked with white, while the male taken in February is mostly buffy white below with a few brownish streaks, the thighs sepia, with buffy margins to the feathers. The latter appears to be more like the usual coloration of the race. They appear to be considerably darker than specimens from more eastern localities.

## 36. MILVUS LINEATUS (Gray)

*Haliaeetus lineatus* GRAY, Hardwicke's Ill. Ind. Zool., vol. 1, pl. 18, p. 1, 1832 (China).

One adult male, Nguluko, 9,800 feet, April 20; one adult female and one adult unsexed, Likiang Plain, 8,200 feet, August and September; one adult female, Tseh Chung Mountains, November; one adult female, Plain north of Wualapi, Youngning, February.

## 37. FALCO REGULUS INSIGNIS (Clark)?

*Aesalon regulus insignis* CLARK, Proc. U. S. Nat. Mus., vol. 32, 1907, p. 470 (Fusan, Korea).

One adult male, Likiang Plain, 9,000 feet, April 14; one immature male, Youngning Lake, 10,000 feet, February.

The immature male is darker than the type of this race (also an immature male of about the same age) and the adult is a rather dark, richly colored specimen and very likely neither of these specimens belong to this race, but I do not know where else to place them. The wing of the adult measures 205 mm.

38. *FALCO SUBBUTEO STREICHI* Hartert and Neumann

*Falco subbuteo streichi* HARTERT and NEUMANN, Journ. für Orn., 1907, p. 592 (Swatow, S. China).

One female, Likiang Mountains, 8,200 feet, August. A rather dark richly colored bird; wing, 250 mm.

39. *CERCHNEIS TINNUNCULUS INTERSTINCTUS* (McClelland)

*Tinnunculus interstinctus* MCCLELLAND, Proc. Zool. Soc. Lond., 1840, p. 154 (Assam).

One adult and four immature males, and one adult and two immature females from Hsia-yan-tsun, March 29; Likiang Mountains, 8,200–11,000 feet, August–December; mountains near Yangtza, Mekong Valley, November.

## Family BUBONIDAE. Eared Owls

40. *BUBO BUBO SETSCHUANUS* Reichenow

*Bubo bubo setschuanus* REICHENOW, Orn. Monatsb., 1903, p. 86 (Setschwan).

One adult female, Tseh Chung Mountains, Mekong Valley, November.

In addition to the above specimen, the United States National Museum contains a male and a female from Chekiang Province, a female from the lower Yangtze near its mouth, and a male from southern Kansu, that allowing for certain slight individual differences, apparently all belong to one form.

They have been shown to Dr. Peter Suschkin, who has made a specialty of the palaeartic members of the genus, and he regards *Bubo bubo setschuanus* as a good form distinct from *B. b. kiautschensis* Reichenow and *B. b. swinhoei* Hartert<sup>11</sup> as a synonym of *B. b. setschuanus*.

The above specimen from Yunnan does not agree with the description of *Bubo bubo jarlandi* La Touche;<sup>12</sup> the primaries are pronouncedly barred below with dark brown.

41. *STRIX NIVIPETENS* Riley

*Strix aluco nivipetens* RILEY, Proc. Biol. Soc. Wash., vol. 38, 1925, p. 10 (Likiang Mts., 11,000 ft. Yunnan).

One adult male (type) and one unsexed, Likiang Mountains, 11,000 feet, April 15 and May 8.

The original diagnosis is as follows: "Similar to *Strix aluco nivicola* (Blyth), but much darker, the back and chest with the white spots replaced by ochraceous-buff, except those on the scapulars and greater wing coverts; flanks and feet ochraceous-buff; the face darker; under wing-coverts ochraceous-buff instead of buffy white;

<sup>11</sup> Vögel palaark. Fauna, vol. 2, Heft 8, 1913, p. 966.

<sup>12</sup> Bull. Brit. Orn. Club, vol. 43, 1921, p. 14.

bars on the tail darker and broader. Wing, 310; tail, 188; culmen from cere, 22 millimeters."

The second specimen is like the type above but lighter below. Both specimens are so different from *Strix aluco nivicola* or any of the related forms that it is doubtful if they are specifically related. For this reason I have now thought it best to raise it to specific rank.

Since writing the above the two specimens have been shown to Dr. Peter Suschkin and he agrees with me that they represent a distinct species. He has called my attention to certain differences that I failed to notice or mention. The most important is a difference in the structure of the wing. In *Strix nivicola* the second to fourth outer primaries are slightly notched on the outer web and slightly narrowed on the fifth, while in *Strix nivipetens* the notches on the outer web extend to the sixth primary and are more pronounced. In *Strix nivipetens* the six outer primaries are situated on the inner web, while in *Strix nivicola* only four are. The fifth primary is the longest in *Strix nivipetens*, the fourth and sixth equal and slightly shorter, the third slightly longer than seventh, while in *Strix nivicola* the fourth and fifth are subequal and longest, the third slightly shorter but longer than sixth. *Strix nivipetens* is a larger bird than *Strix nivicola*, with a slightly different color pattern, perfectly obvious to the eye but hard to define. The barring to the feathers above and below is coarser and darker, with an admixture of ochraceous-buff. The center of the belly is ochraceous-buff, unmarked in the type, but with a few obscure bars in the unsexed specimen, instead of the light buffish, almost white of *Strix nivicola*. This difference was not mentioned in the original description. There are other minor differences, both in color and structure, but enough has been given to show that this is a very distinct species. Doctor Suschkin is of the opinion that it represents a tropical type of the genus and has nothing to do with the northern races.

## Family PSITTACIDAE. Parrots

### 42. PSITTACULA DERBIANA (Fraser)

*Palaeornis derbiana* FRASER. Proc. Zool. Soc. Lond., 1850, p. 245, pl. 25 (cage bird).

One male, and one female, near Hsia-yan-tsun, March 29; one male immature, Hofuping Mountains, Mekong Valley, November.

Shortly before receiving the Yunnan collection, the National Museum received two females purchased by the Rev. David C. Graham at Chengtu, Szechwan, which were said to have been brought from further south. One is apparently adult and the other a younger bird. The adult is not essentially different from the adult female from Yunnan; the younger bird has the forehead behind the black

band as far as the eyes, the fore part of the cheeks and the region around the eye bremen blue; below there is a more bluish sheen to the purple than in the adult. The immature male has the green of hind neck extend onto the occiput, and the purple of the lower parts is not so deep as in the adult.

While in color pattern *Psittacula derbiana* is like *Psittacula fasciata*, it is a much larger bird and the chest and breast are deep dull lavender (instead of orange-vinaceous washed with lavender), and this color extends further posteriorly; the under wing-coverts are green in *fasciata* and bluish lavender in *derbiana*.

#### 43. PSITTACULA SCHISTICEPS FINSCHI (Hume)

*Palaeornis finschi* HUME, Stray Feath., vol. 2, 1874, p. 509 (Kollidoo, Salwin R.).

A good series of adults and immature from: Limestone Range, east of Likiang Mountains, 10,000 feet, July 2; east slopes of Likiang Mountains, Yoshanlo, July; near Ashi, banks of the Yangtze, July; Likiang Plain, August; Lhiku Mountains on the Yangtze, November.

Most of this series is in molt or worn plumage. Only a male taken in November is in good, unworn plumage. Comparing this with *Psittacula s. schisticeps* it is smaller; the black cravat broader; the head more of a light-violet gray; the back more yellowish green; the tips of the longer tail feathers, except the extreme tips, buff yellow instead of lemon chrome; and there are other slight differences.

The specimens in molt with the central tail feathers about half grown or less, have the exposed part of the tail capucine buff, only the extreme tips lemon yellow; this fades as growth proceeds.

### Family CORACIIDAE. Rollers

#### 44. CORACIAS AFFINIS McClelland

*Coracias affinis* McCLELLAND, Proc. Zool. Soc., Lond., 1839, p. 164 (Assam).

One male, Likiang Plain, August; two males and four females, no definite locality.

I have only had one adult male from eastern Siam for comparison. The Yunnan birds have uniformly larger bills and the bend of the wing more extensively blue.

### Family ALCEDINIDAE. Kingfishers

#### 45. MEGACERYLE LUGUBRIS GUTTULATA (Stejneger)

*Ceryle guttulata* STEJNEGER, Proc. U. S. Nat. Mus., vol. 15, 1893, p. 294 (new name for *Alcedo guttulata* Vigors, 1831, not Boddaert, 1783—Himalayas).

Two males Likiang Plain, 8,200 feet, August 22 and 23.

46. *ALCEDO ATTHIS BENGALENSIS* Gmelin

*Alcedo bengalensis* GMELIN, Sys. Nat., vol. 1, 1788, p. 450 (Bengalen).

Five males, Likiang Plain, 8,200 feet, August.

47. *HALCYON PILEATA* (Boddaert)

*Alcedo pileata* BODDAERT, Table Pl. Enl., 1783, p. 41 (China).

One male, north of Likiang, August.

48. *HALCYON SMYRNENSIS FUSCA* (Boddaert)

*Alcedo fusca* BODDAERT, Table Pl. Enl., 1783, p. 54 (Coast of Malabar).

One female, near Chüchi, March 12; one male, north of Likiang, 8,200 feet, August.

## Family UPUPIDAE. Hoopoes

49. *UPUPA EPOPS SATURATA* Lönnerberg

*Upupa epops saturata* LÖNNBERG, Arkiv för zool., vol. 5, No. 9, 1909, p. 29 (Kjächta, Transbaicalia).

One male, Feilung-chiao, Mekong Valley, March 20; one male, Chienchuan, 8,000 feet, June; one female, Likiang Plain, 8,200 feet, August; one male, Likiang, 8,500–9,000 feet, September.

These agree with specimens from central and north China. The race is not very well differentiated.

## Family CAPRIMULGIDAE. Goat Suckers

50. *CAPRIMULGUS INDICUS JOTAKA* Temminck and Schlegel

*Caprimulgus jotaka* TEMMINCK and SCHLEGEL, Fauna Japon. Aves, 1847, p. 37, pl. 12 (Japan).

Two males and one female, Likiang Mountains, 8,000–10,000 feet, April 10, July, and August.

## Family CUCULIDAE. Cuckoos

51. *HIEROCOCCYX SPARVERIOIDES* (Vigors)

*Cuculus sparverioides* VIGORS, Proc. Zool. Soc. Lond., 1832, p. 173 (Himalaya).

Two females and one unsexed, Likiang Mountains, 10,000–11,000 feet, May 26, June; one male, Likiang-Lashipa Plain, 8,400 feet, May 27.

52. *CUCULUS INTERMEDIUS INTERMEDIUS* Vahl

*Cuculus intermedius* VAHL, Skrivt. af Nat.-Selskabet, Kjobenhavn, vol. 4, 1789, p. 58 (S. India).

Two females, Likiang Mountains, June and July.

The July specimen is a young bird, not long from the nest, and the June specimen has a few feathers of the immature plumage still



remaining on the crown and foreneck, and the tail has been recently acquired and has not yet reached full growth.

53. *CUCULUS OPTATUS* Gould

*Cuculus optatus* GOULD, Proc. Zool. Soc. Lond., 1845, p. 18 (Port Essington, Australia).

A fair series of adults and immatures in various stages of plumage: Likiang Mountains, 8,300–10,000 feet, April 19–August; Likiang Plain, 8,200–8,400 feet, May 7 and August; between Kanhoten and Shayangching, June 4.

54. *CACOMANTIS MERULINUS QUERULUS* Heine

*Cacomantis querulus* HEINE, Journ. für Orn., 1863, p. 352 (India, Nepal, Burma).

One adult and one immature male, Likiang Mountains, 10,000 feet, September; one female still in immature plumage, Loyü, Yangtze Gorge, 7,600 feet, May 22.

Family CAPITONIDAE. Barbets

55. *CYANOPS ASIATICA* (Latham)

*Trogon asiaticus* LATHAM, Ind. Orn., vol. 1, 1790, p. 201 (India).

One female, Monglei, Salwin Valley, March 14.

Family PICIDAE. Woodpeckers

56. *PICUS CANUS SORDIDIOR* (Rippon)

*Gecinus sordidior* RIPPON, Bull. Brit. Orn. Club, vol. 19, 1906, p. 32 (Yangtze Big Bend).

A good series: Likiang Mountains, 8,500–12,000 feet, May–August; pine forests three days north of Likiang, 10,000 feet, May 1; Hofuping Mountains (Mount Tola), October–November; pine forest north of Heshwe, 11,000 feet, February.

Most of this series is in worn faded plumage and not suitable for comparison. It seems that the Chinese forms of this species are in much need of revision but the proper material is not available at this time to undertake the task.

57. *DRYOBATES MAJOR STRESEMANNI* Rensch

*Dryobates major stresemanni* RENSCH, Abh. u. Ber. d. Mus. f. Tierk. u. Volkerk. Dresden, vol. 16, No. 2, 1924, p. 38 (Tsalila, Szechwan).

Four males and three females, Likiang Mountains, 8,500–12,000 feet, April, June, and August; one male, Likiang Plain, 8,200 feet, August 22; one male, Hofuping Mountains, November.

The above series averages considerably darker below than a small series of *Dryobates major cabanisi* from Shensi and Hupeh. A male from Fukien is slightly lighter than a male from Hupeh; Shanghai specimens average even lighter. La Touche<sup>13</sup> also, has noticed the darker Yunnan bird.

58. *DRYOBATES DARJELLENSIS* (Blyth)

*Picus (Dendrocopus) darjellensis* BLYTH, Journ. Asiatic Soc. Bengal, vol. 14, 1845, p. 196 (Darjeeling).

One female, between Lachiming and Lanping, 9,000 feet, June 2; and one male, mountains above Hungfuping, Mekong Valley, November.

The above male only differs from the female in having the sides of the neck orange instead of yellow, in darker underparts, and the yellow wash on the breast and belly more pronounced; possibly it is only a bird of the year that has not yet acquired the red occipital band.

59. *HYPOPICUS HYPERYTHRUS SUBRUFINUS* (Cabanis and Heine)

*Xylurgus subrufinus* CABANIS and HEINE, Mus. Heine, pt. 4, Heft 2, 1863, p. 50 (N. China; Talién Bay and Tientsin).

One immature male and three adult females, Likiang Mountains, July.

The immature male is a light buffy brown below barred with black; a mere tinge of red on the crown and under tail coverts.

The females compared with an equal number from north China are considerably darker below.

60. *PICOIDES FUNEBRIS* Verreaux

*Picoides funebris* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull., 1870, p. 33 (Mountains of Chinese Tibet).

One male, Tseh Chung Mountains, November, and one male, Hofuping Mountains, November.

This is a very distinct species.

61. *YUNGIPICUS SCINTILLICEPS* Omissus (Rothschild)

*Dryobates pygmaeus omissus* ROTHSCCHILD, Bull. Brit. Orn. Club, vol. 43, 1922, p. 10 (Lichiang Range).

One female, between Dyinaloko and Baiywua, May 1; one male between Tuinakou and Likiang, 9,000 feet, May 18; one male, Likiang Mountains, August; one male, forests of Mili, southwest Szechwan, February.

These are more heavily streaked below than *Yungipicus s. scintilliceps*.

<sup>13</sup> Ibis, 1924, p. 285.

62. *THRIPONAX FORRESTI* (Rothschild)

*Dryocopus forresti* ROTHSCILD, Bull. Brit. Orn. Club, vol. 43, 1922, p. 9  
(Mekong Valley, Yunnan).

One adult male, Likiang Mountains, July.

63. *JYNX TORQUILLA JAPONICA* Bonaparte

*Yunx japonica* BONAPARTE, Consp. Gen. Av., vol. 1, 1850, p. 112 (Japan).

One female, Likiang Mountains, 11,000 feet, May 9; one unsexed,  
Likiang Plain, 9,000 feet, April 14.

## Family HIRUNDINIDAE. Swallows

64. *HIRUNDO RUSTICA GUTTURALIS* (Scopoli)

*Hirundo gutturalis* SCOPOLI, Del. Flor. et Faun. Insubr., vol. 2, 1786, p. 96  
(Panay, Philippines).

Three immatures, Ashi, banks of the Yangtze, July.

65. *PTYONOPROGNE RUPESTRIS* (Scopoli)

*Hirundo rupestris* SCOPOLI, Annus I Histor.-Nat., 1769, p. 167 (Tirol).

One male and one female, near Yangtza, Mekong Valley, November.

## Family MUSCICAPIDAE. Flycatchers

66. *HEMICHELIDON SIBIRICA ROTHSCILDI* Baker

*Hemichelidon sibirica rothschildi* BAKER, Bull. Brit. Orn. Club, vol. 43,  
1923, p. 156 (Lichiang Range, N. W. Yunnan).

One male and four females, Likiang Mountains, 10,000 feet, June,  
July, and September.

A well-marked smaller and darker race of *H. sibirica*.

67. *ARIZELOMYIA LATIROSTRIS* (Raffles)

*Muscicapa latirostris* RAFFLES, Trans. Linn. Soc. Lond., vol. 13, 1821, p. 312  
(Sumatra).

Two adult females and one unsexed, Likiang Plain, 8,200 feet,  
August.

68. *SIPHIA PARVA ALBICILLA* (Pallas)

*Muscicapa albicilla* PALLAS, Zoogr. Ross.-Asiat., vol. 1, 1827, p. 462  
(Dauria).

Three males and three females, Likiang Mountains, 9,500–12,000  
feet, September.

69. *SIPHIA STROPHIATA* Hodgson

*Siphia strophciata* HODGSON, Indian Review, vol. 1, 1837, p. 651 (Nepal).

A fair series from various stations in the Likiang Mountains,  
11,000–12,000 feet, April, June, and July; one male, Yangtze Gorge,  
near Yulo, 7,400 feet, May.

A male from the Taipeishan district, Shensi, April 21, in the United States National Museum (237709) has the white frontal band much wider than any in the Yunnan series, but whether this is individual or not it is impossible to say. One male and two females from the Langbian Peaks, South Annam, taken in mid-April, certainly represent a distinct form. They are more of a russet brown above; the throat is slate gray, not blackish (in the male); and the white frontal band is reduced to almost the vanishing point. This form has been named *Siphia strophciata fuscogularis* Baker.<sup>14</sup>

#### 70. DIGENEA TRICOLOR CERVINIVENTRIS Sharpe

*Digenea cerviniventris* SHARPE, Cat. Birds Brit. Mus., vol. 4, 1879, p. 460 (Manipur Hills).

Four males and two females from various stations in the Likiang Mountains, 12,000 feet, April 27, June, July, and September.

One of the above females has a broken bill, which caused me to overlook its position and send it to Outram Bangs for identification. He writes that the single female in the Museum of Comparative Zoology from Washan Mountain, Szechwan, has rusty spots at the ends of the greater wing coverts, while in the one sent him they are plain. This is a sign of immaturity. The above two females are not alike. One is lighter above, has rusty spots at the ends of the greater wing coverts, and the tail lighter and more uniformly colored than the other. It is probably not fully adult.

#### 71. NILTAVA SUNDARA DENOTATA Bangs and Phillips

*Niltava sundara denotata* BANGS and PHILLIPS, Bull. Mus. Comp. Zool., vol. 58, no. 6, 1914, p. 280 (Mengtsze, Yunnan).

A good series of adults and immature from various stations in the Likiang Mountains, 9,500–12,500 feet, April–August.

The series of males shows quite a little variation, the mantle varying from a shining indulin blue to blackish violet-gray with little blue sheen and the lower parts from mars yellow to a much lighter hue.

The only typical specimen of *sundara* available for comparison is like the indulin-backed Yunnan male, but I prefer to follow Bangs<sup>15</sup> for the present.

There are two immature males, taken in July and August, respectively. The August specimen much duskier than the other and evidently younger. Both have acquired the blue tail and wings of the adult, however.

<sup>14</sup> Bull. Brit. Orn. Club, vol. 43, 1923, p. 11.

<sup>15</sup> Bull. Amer. Mus. Nat. Hist., vol. 44, 1921, p. 582.

## 72. POLIOMYIAS HODGSONI (Verreaux)

*Siphia hodgsonii* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull., 1870, p. 34 (Mupin).

One male, Likiang Plain, May 7; four males, three females, and one immature, Likiang Mountains, 12,000–13,000 feet, June–August.

The immature is still in the spotted plumage, though nearly full grown. It was taken in August.

## 73. MUSCICAPULA SUPERCILIARIS ASTIGMA (Hodgson)

*Muscicapa astigma* HODGSON, in Gray's Zool. Misc., 1844, p. 84 (Nepal).

Three males and two females, Likiang Mountains, 10,000 feet, June and July.

A well-marked form; larger and lacking the white post-superciliary of *M. s. superciliaris*. The female is also quite different; much grayer above and on sides of neck.

## 74. CHELIDORYNX HYPOXANTHA (Blyth)

*Rhipidura hypoxantha* BLYTH, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 935 (Darjeeling).

Two males, Likiang Mountains, 9,600 feet, April 20 and July.

## 75. RHIPIDURA ALBICOLLIS, subspecies?

*Platyrhynchus albicollis* VIEILLLOT, Nouv. Diet. d'Hist. Nat., vol. 27, 1918, p. 13 (Bengal).

One adult unsexed, Likiang Mountains, 10,000 feet, May 26; one female, Whei Hsi, Mekong Divide, October; one male, Yetche, Mekong River, November.

I have only two birds from India and two from South Annam for comparison. The Indian birds are browner above than those from South Annam and the Yunnan specimens are grayer, with darker heads and tails and smaller bills than the latter. The Yunnan bird is quite distinct from that of India (one of the specimens is from Tenasserim), but for the present I prefer to leave it unnamed.

## 76. CULICICAPA CEYLONENSIS ORIENTALIS Baker

*Culicicapa ceylonensis orientalis* BAKER, Bull. Brit. Orn. Club, vol. 44, 1923, p. 11 (Szechwan).

One unsexed adult, Likiang Mountains, 11,000–12,000 feet, April 12.

## 77. EUMYIAS THALASSINA THALASSINA (Swainson)

*Muscicapa thalassina* SWAINSON, Nat. Hist. Flycatchers, 1838, p. 252 (India).

Four males and three females, Likiang Mountains, 8,500–12,000 feet, May, July, and August; one male, between Ganhaitze and



Yangtze Gorge, 9,000 feet, May 20; two males and one female, Likiang Plain, 8,200 feet, August 22-23.

A male and female from the last locality are immature, changing from the spotted plumage to that of the adult, and the change has been practically completed except for the throat and chest.

### Family CAMPEPHAGIDAE. Caterpillar Shrikes

#### 78. *GRAUCALUS MACEI SIAMENSIS* Baker

*Graucalus macei siamensis* BAKER, Bull. Brit. Orn. Club, vol. 38, 1918, p. 69 (Mi-Nam-Kabren, Siam).

One adult male, marked female, Limestone range east of the Likiang Mountains, 10,000 feet, July.

Wing measures 185 mm.

#### 79. *CAMPEPHAGA MELASCHISTA AVENSIS* Blyth

*Campephaga avensis* BLYTH, Cat. Birds Asiatic Soc., 1847, p. 327 (Arakan).

One adult female, Taitzutung, east slope of Likiang Mountains, July.

This is a much darker bird, both above and below, than a male and two females from Anhwei and Hunan Provinces, but Stuart Baker,<sup>16</sup> with a series of 200 specimens, says that dark birds occur along with light ones and are not confined to particular areas.

#### 80. *PERICROCOTUS BREVIROSTRIS AFFINIS* McClelland

*Pericrocotus affinis* McCLELLAND, Proc. Zool. Soc. Lond., 1839, p. 156 (Assam).

One male and one female, Tengyueh (Paofungssu), 5,600 feet, March 5; one male, between Pakang and Wamangai, March 16; one male, between Feilung Chiao and Yünlung, March 21.

The female is considerably darker above than the same sex of *P. b. ethologus*, the forehead yellowish instead of whitish, and the lower parts a deeper yellow.

The males can not be told with certainty from *P. b. ethologus*, except they seem to have considerably shorter tails.

#### 81. *PERICROCOTUS BREVIROSTRIS ETHOLOGUS* Bangs and Phillips

*Pericrocotus brevirostris ethologus* BANGS and PHILLIPS, Bull. Mus. Comp. Zool., vol. 58, 1914, p. 282 (Hsienshan, Hupeh).

A good series from: Likiang Mountains, 8,500-12,000 feet, April-August; Likiang Plain, 8,200-9,400 feet, May and August; Likiang Forests, August.

<sup>16</sup> Fauna Brit. India, Birds, ed. 2., vol. 2, 1924, p. 338.

The males of this series differ principally from the series I have called *P. b. affinis* from the Burma border in having longer tails and the lower parts scarlet instead of scarlet red. The only female of *P. b. affinis* available is quite different from the same sex of *P. b. ethologus*. It is much darker above without the olive wash to the lower back, the forehead yellowish, and the rump and lower parts a much deeper yellow.

A male in the Museum from Shensi has a shorter tail than the Likiang males and the red below is not quite so scarlet.

*Pericrocotus brevirostris styani* Baker<sup>17</sup> is apparently only a synonym of Bangs and Phillips' form, as he evidently overlooked their paper.

An immature female, taken in the Likiang Mountains in August, has the feathers of the head and mantle barred with blackish and narrowly tipped with white, the throat and chest barred with dusky. A female taken at the same time and place is much lighter above than the adult and below has the plumage much mixed with grayish-white. It is an immature in the next stage after losing the dusky and white bars above and the dusky bars below.

## Family PYCNONOTIDAE. Bulbuls

### 82. MICROSCELIS LEUCOCEPHALUS (Gmelin)

*Turdus leucocephalus* GMELIN, Sys. Nat., vol. 1, pt. 2, 1789, p. 829 (China).

A fair series of both sexes and immature: Likiang Mountains, 8,200–10,000 feet, April–August; Likiang Plain, 8,200 feet, August; Ashi, banks of the Yangtze, July; Lameka, north of Lashipa, July; Tseh Chung Mountains, Mekong Valley, November.

The United States National Museum has acquired quite a series of this species in recent years from the various parts of its range. Amongst this series there are specimens wholly black; black with a white head; black with a gray breast and white head; and specimens changing from one plumage to another. I rather think the wholly black bird is a younger stage of plumage, as one specimen of this phase (296540) has a dark upper mandible; the black birds with white heads the next stage; and the black-backed, gray-breasted, white-headed birds the fully adult of the second or third year. Yet there is a specimen (296539), black-backed and gray-breasted changing from a dark colored head to a white one, which would tend to show that this plumage is sometimes acquired at the first molt. It seems to me that *Hariningtonia leucocephalus montivagus* Bangs and Penard<sup>18</sup> represents only the black phase of the present species.

<sup>17</sup> Bull. Brit. Orn. Club, vol. 40, 1920, p. 117.

<sup>18</sup> Proc. New England Zool. Club, vol. 8, 1923, p. 41.

83. *MICROSCELIS PSAROIDES CONCOLOR* (Blyth)

*Hypsipetes concolor* BLYTH, Journ. Asiatic Soc. Bengal, vol. 18, 1850, p. 816 (Tenasserim).

Two adults (unsexed), between Hsia-yang-tsun and Chienchuan (pine forest), March 30; one male, pine forest northwest of Shayangching, 8,900 feet, May 30; one male and one female, Forest of Ngaza, west of Likiang Mountains, 8,600 feet, June; one male between Lochming and Lamping, 9,000 feet, June; one immature female, Hofuping Mountains, Mekong Valley, November.

The above series has been compared with two males and two females from south Annam, collected by Kloss. The Annam birds are clearer, darker gray below, but the Yunnan series is more worn and faded and hardly comparable.

The immature listed above may or may not be this species. It is black, almost glossless; the throat and foreneck lightly frosted with white; breast, belly, and under tail coverts white, streaked with black; middle wing coverts narrowly tipped with yellowish white; under wing coverts and a narrow border on the inner webs of the remiges white; upper tail coverts white stippled rather heavily with black. The bill (in the dried skin), blackish above, brownish (below).

This is entirely distinct from the black phase of *Microscelis leucocephalus*, to which the present species is very closely related. If not the immature plumage of *Microscelis p. concolor* (of which I have seen no description), I do not know where to place it.

84. *MOLPASTES HAEMORRHOUS NIGRIPILEUS* (Blyth)

*Pycnonotus nigripileus* BLYTH, Journ. Asiatic Soc. Bengal, vol. 16, 1847, p. 472 (Tenasserim).

One male between Chugai and Kantingai, 6,000 feet, Salween Valley, March 14.

This specimen has the black of the throat very restricted, not even extending onto the foreneck. It has apparently not been reported from Yunnan before.

85. *PYCNONOTUS AURIGASTER XANTHORHOUS* Anderson

*Pycnonotus xanthorhous* ANDERSON, Proc. Asiatic Soc. Bengal, 1869, p. 265 (Manwyne, Yunnan).

One, Huigai, March 11; one male, between Kantingai and Musanlin, Salween Valley, March 15; one male, Wamangai and Tsao Chiang, March 17; one male, Feilung Chiao, Mekong Valley, March 20; one female, Yünlung, March 22; one male and one female, Nguluko, 9,400 feet, Likiang Mountains, April 5.

86. *OTOCOMPSA EMERIA EMERIA* (Linnaeus)

*Lanius emeria* LINNAEUS, Syst. Nat., ed. 12, 1766, p. 137 (Bengal).

One male, between Chugai and Kantingai, 6,000 feet, Salween Valley, March 14; one male, between Kantingai and Musanglai, Salween Valley, March 15.

87. *SPIZIXOS CANIFRONS* Blyth

*Spizixos canifrons* BLYTH, Journ. Asiatic Soc. Bengal, vol. 14, 1845, p. 571 (Cherra Punji).

A good series of both sexes from between Chungai and Kantingai, Salween Valley, 6,000 feet, March; between Yünlung and Tanten, March; between Likiang and Tuinakou, 10,000 feet, May; Mount Mitzuza, 12,000 feet, forest of Mili, southwest Szechwan, February.

## Family TIMALIIDAE. Babbling Thrushes

88. *BABAX LANCEOLATA BONVALOTI* Oustalet

*Babax lanceolatus*, var. *bonvaloti* OUSTALET, Ann. Sci. Nat., ser. 7, vol. 7, 1892, pp. 273, 274 (So. Tibet, error!); Nouv. Arch. Mus. Paris, ser. 3, vol. 5, p. 192 (Tara, Tibet).

A small series of adults and young from between Yünlung and Tanten, March; Lashipa Plain, 8,600 feet, June; Likiang Mountains, 11,000–12,000 feet, April–September.

The series averages larger and darker than the single male of *Babax l. lanceolata* from Hupeh with which it has been compared.

The immature only differs from the adult in having the brown stripes above and on the flanks reduced in size and depth of color; in fact, the stripes on the flanks are almost absent.

89. *TROCHALOPTERON ELLIOTII ELLIOTII* Verreaux

*Trochalopteron elliotii* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull. 1870, p. 36 (Mountains of Chinese Tibet).

A good series of adults from: Mountains near Yangtza, Mekong Valley, November; mountains above Hungfuping, November; Hofuping Mountains, Mekong Valley, November; Tseh Chung Mountains, Mekong Valley, November; forests of Mili, southwest Szechwan, February.

The above series agrees quite well with a small number of specimens from Szechwan (Mount Omei). Specimens in the United States National Museum from Shensi and Hupeh Provinces are considerably lighter, but not quite as light as the series I have identified as *T. e. yunnanense*.

## 90. TROCHALOPTERON ELLIOTI YUNNANENSE Rippon

*Trochalopteron yunnanense* RIPPON, Bull. Brit. Orn. Club, vol. 19, 1906, p. 32 (Yangtze River, W. Yunnan).

A good series of adults and immatures from Nguluko, 9,000 feet, April; Likiang Plain, 9,000 feet, April 14; Likiang Mountains, 10,000–15,000 feet, April–September; between Likiang and Gan-haitze, 10,000 feet, May; Bayiwua, 10,000 feet, May; between Dyinaloko and Bayiwua, May; Lameko Mountain, north of Lashipa, July.

The above series is considerably lighter below than what I take to be *T. e. ellioti*, and lacks to a great extent the white edging to the feathers of the throat and chest, and the central tail feathers are gray with little or no yellow as a rule.

My disposition of this form does not agree with the original diagnosis; it may be Rippon's description really applies to the preceding race. Anyway the form is not well marked and the distribution as worked out above hard to understand, unless this is a form confined to the high mountains and the form found in the Mekong watershed and the western border is unnamed, but for the present I prefer to leave the matter in abeyance, as the differences may be seasonable.

Young about half grown in the series, taken in July, resemble the adult, except the throats, pileum, and ear coverts are darker, the central tail feathers orange-citrine, and the malar stripe is buffy. Two immature specimens of adult size taken in August and September still retain these characters, but not in so pronounced a form.

## 91. TROCHALOPTERON AFFINIS OUSTALETI (Hartert)

*Ianthocincla affinis oustaleti* HARTERT, Vögel paläark. Fauna, vol. 1, Heft 5, 1909, p. 633 (Tsékou, Yunnan).

A fine series from Likiang Mountains, 12,000 feet, April–August; Wheihsi, Mekong Valley, October; Mountains near Yangtza, Mekong Valley, November; Hofuping Mountains, Mekong Valley, November; forest of Youngning, February; forests of Mili, S. W. Szechwan, February.

Specimens with the top of the head brownish instead of black are mostly marked as females by the collector, so I imagine this is a sexual or age character.

I have only one specimen of *T. a. blythi*, a male from near Kiating, Szechwan, for comparison. It is considerably smaller than males in the above series and lacks the gray patch on the sides of the neck, otherwise it is very similar in color.



92. *TROCHALOPTERON STYANI* Oustalet

*Trochalopecteron styani* OUSTALET, Bull. Mus. Paris, vol. 4, 1898, p. 226 (Ta-t sien-lou, Szechwan).

One male, mountains near Yangtza, Mekong Valley, November; two females, Hofuping Mountains, Mekong Valley, November; one male and one female, Tseh Chung, Mekong Valley, November.

These specimens are so very different from the plate of *Trochalopecteron cinereiceps* Styani<sup>19</sup> that it seems to me that to sink *styani* to only a race of that species is to more or less obscure these fundamental differences. The differences have already been pointed out by Hartert.<sup>20</sup>

93. *IANTHOCINCLA MAXIMA* (Verreaux)

*Pterorhinus maximus* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull. 1870, p. 36, pl. 3, fig. 1 (Mountains of Chinese Tibet).

A good series of both sexes from Likiang Mountains, 10,000–12,000 feet, April to August; Litiping Mountains, Mekong-Yangtze Divide, October; Hofuping Mountains, Mekong Valley, November; Mount Dyinaloko, 11,500–12,000 feet, April and June; Mountains near Yangtza, Mekong Valley, November; forest of Mili, S. W. Szechwan, February.

Some specimens have the feathers of the throat and chest with subterminal black bars, while in others these bars are only faintly indicated on the sides of the chest. The upper back has the terminal spots buffy or white, with the latter predominating in the series. Winter specimens are darker below than those taken in summer.

94. *IANTHOCINCLA BIETI* Oustalet

*Ianthocincla bieti* OUSTALET, Bull. Mus. Paris, vol. 3, 1897, p. 163 (Tatsien-lou, Szechwan).

Five males and three females from Hofuping Mountains, Mekong Valley, November; and Litiping Mountains, Yangtze-Mekong Divide, 12,000 feet, November.

Rothschild<sup>21</sup> in commenting upon specimens from the same general region says that they differ somewhat from the original description but does not mention in what particular. Below a description is given for future comparison:

Above antique brown, becoming sudan brown on the pileum; each feather above from the nape to the tail with a subterminal black bar and white tip; lores, region around the eye, and upper and posterior border of ear coverts white; a narrow line of blackish bordering the white on the lores and above the eye and meeting a post-ocular black-

<sup>19</sup> Ibis, 1887, pl. 6.

<sup>20</sup> Vögel paläarkt. Fauna, vol. 1, Heft 5, 1909, p. 630.

<sup>21</sup> Nov. Zool., vol. 30, 1923, p. 44.

ish line posteriorly; throat, chest, and lower ear-coverts fuscous or blackish, the feathers of the chest tipped with white; breast smoke gray, the feathers tipped with white; belly white; sides, flanks, and under tail-coverts like the back or a little lighter, the feathers with a narrow subterminal black bar and white tip; sides of neck the color of the back with small white spots; wing coverts like the back and with similar spots; alula dark gull gray with a small white tip to the feathers; primary coverts black tipped with white; six outer primaries, deep gull gray on the inner and outer web, black along the shaft, part of the inner web, and subterminally, the tip white; the seventh primary becoming brown basally on the outer and this color increasing inwardly until the secondaries become wholly brown on the outer web, black on the inner and subterminally, tipped with white; the tertials wholly brown with a subterminal black bar and white tip; middle tail feathers like the back in color with a subterminal black bar and narrow white tips; outer tail-feather deep gull gray, with a broad subterminal black bar and white tip; the second outer tail feather becoming brown basally and this color increasing inwardly until the middle feathers are reached; all the tail feathers have the black subterminal bar and white tip, but considerably reduced on the middle pair.

*Remarks.*—In some specimens the chest is the color of the back with a narrow black subterminal black bar and white tip; in fact, the birds with the chest fuscous or blackish with white tips to the feathers seem to be the rarer of the two.

The series measures as follows: Five males, wing, 109–120 (112.7); tail, 135–140 (138); culmen, 26–28 (26.8); and three females, wing, 109–112 (110.3); tail, 133–139.5 (136.5); culmen, 25.5–27 (26.2).

95. *POMATORHINUS RUFICOLLIS BAKERI* Harington

*Pomatorhinus ruficollis bakeri* HARINGTON, Journ. Bombay Nat. Hist. Soc., vol. 23, 1914, p. 336 (Shillong).

Three males and eight females from: Tengyueh, 5,300 feet, March 7; Likiang Mountains, June and August; Ngaza, east of Likiang Mountains, June; Hofuping Mountains, Mekong Valley, November.

This series is quite uniform in color and averages larger and lighter than a series from Suifu, Szechwan (*Pomatorhinus ruficollis styani*). One male and two females from Fukien and Hunan are slightly smaller and much darker than Szechwan specimens and represent *Pomatorhinus ruficollis stridulus*. From the evidence at hand there are at least three recognizable mainland races of this species in China, namely: *Pomatorhinus ruficollis bakeri* Harington (Assam to western Yunnan), *Pomatorhinus ruficollis stridulus* Swinhoe (southeast China), and *Pomatorhinus ruficollis styani* Seeböhm (Yangtze Valley).

Three additional races have been named from southeast Yunnan, namely: *Pomatorhinus ruficollis reconditus* Bangs and Phillips;<sup>22</sup> *Pomatorhinus ruficollis laurentei* La Touche;<sup>23</sup> and *Pomatorhinus ruficollis albipectus* La Touche.<sup>24</sup> The United States National Museum contains no material from this region and so I am not able to judge of the validity of the forms, but if they should prove to be synonymous with *P. r. bakeri*, then Bangs and Phillips's name should be used for it.

96. POMATORHINUS ERYTHROGENYS DEDEKENSIS (Oustalet)

*Pomatorhinus macclellandi*, var. *dedekensi* OUSTALET, Ann. Sci. Nat. Zool., ser. 7, vol. 12, 1892, pp., 276, 304 (Tibet and Tatsienlou).

A fine series of adults and immatures from: Yüinglung, March; Likiang Plain, 9,000 feet, April and August; Likiang Mountains, 10,000 feet, April–August; Limestone Range, 10,000 feet, east of the Likiang Mountains, July; Hofuping Mountains, Mekong Valley, November; Mountains near Yangtza, Mekong Valley, November; Forests of Youngning, northwest Yunnan Plain, February.

There is considerable variation in this series. Early spring and fall taken examples are much darker above, the sides and flanks deeper, and the spotting below heavier than birds taken in the summer when wear and fading sets in. There is considerable individual variation, however, especially in the amount of spotting below.

I have only a pair of birds from Shensi (*P. e. gravirox*) for comparison, the female smaller and darker than the male. These two specimens average considerably lighter than birds in corresponding plumage in the Yunnan series. It seems to me that *Pomatorhinus macclellandi odicus* Bangs and Phillips<sup>25</sup> is only a synonym of Oustalet's bird.

97. DRYONASTES SANNIO ALEOSUPERCILIARIS (Godwin-Austen)

*Garrular albosuperciliaris* GODWIN-AUSTEN, Proc. Zool. Soc., 1874, p. 45 (Munipur Valley, near Kaibi).

A good series from: Near Feilung Chiao, Mekong Valley, March 20; between Tan Ten and Ssuching, March 24; Nguluko, 10,000 feet, April 7; Likiang Mountains, 8,000–10,000 feet, June–August; Likiang-Lashipa Plain, 8,600 feet, May; Forests of Chingai, 6,000 feet, Salween Valley, May 14; Likiang Plain, 8,200 feet, August; Tsch Chung, Mekong Valley, November; Hofuping Mountains, Mekong Valley, November.

This series bears out the characters pointed out by Bangs<sup>26</sup> when compared with birds from central and southeast China.

<sup>22</sup> Bull. Mus. Comp. Zool., vol. 58, no. 6, April, 1914, p. 286 (Mengtze, Yunnan).

<sup>23</sup> Bull. Brit. Orn. Club, vol. 42, 1921, p. 16 (Kopaotsun, S. E. Yunnan).

<sup>24</sup> Idem, vol. 43, 1923, p. 173 (Szemao, S. Yunnan).

<sup>25</sup> Bull. Mus. Comp. Zool., vol. 58, 1914, p. 286.

<sup>26</sup> Bull. Amer. Mus. Nat. Hist., vol. 20, 1921, p. 588.

98. *ALCIPPORNIS NIPALENSIS YUNNANENSIS* (Harington)

*Alcippe fratercula yunnanensis* HARINGTON, Bull. Brit. Orn. Club, vol. 33, 1913, p. 63 (Gyi-dzin-shan, east of Talifu, Yunnan).

One female, Tengyueh, Paofungssu, 5,600 feet, March 5; one male, Yangtza Mountains, Mekong Valley, November.

These two specimens when compared with *A. n. nipalensis* are quite distinct. They are more of a buffy brown on the back without a reddish cast; the tail not very distinctly different from the back; the pileum and hind neck a purer gray; the lower parts more extensively and a deeper cinnamon-buff with little or no white. *A. n. hueti* is sort of intermediate in color between *A. n. nipalensis* and *A. n. yunnanensis*, but nearer the former from which it is quite distinct, however. It is a clearer gray on the pileum, more buffy below, and somewhat larger than *A. n. nipalensis*.

99. *FULVETTA RUFICAPILLA SORDIDIOR* (Rippon)

*Proparus sordidior* RIPPON, Bull. Brit. Orn. Club, vol. 13, 1903, p. 60 (Talifu, Yunnan).

One female between Tuinakou and Likiang, 9,000 feet, May 18; one female, Likiang Plain, 8,200 feet, August 21; one female, Hofuping Mountains, November.

100. *FULVETTA VINIPECTA BIETI* (Oustalet)

*Alcippe (Proparus) bieti* OUSTALET, Ann. Sci. Nat., ser. 7, vol. 12, 1892, p. 284, pl. 9, fig. 2 (Ta-t sien-lou).

A series of adult males and females: Likiang Mountains, 12,000–14,000 feet; April–July; between Baiywua and Heshwe, 10,000 feet, May 2; between Likiang and Ganhaitze, 10,000 feet, May 19; Yangtza Mountains, Mekong-Salwin Divide, November; Hofuping Mountains, Mekong Valley, November; Forests of Youngning, February.

This series agrees essentially with a specimen from near Tatsienlu, the type locality, but differs from *vinipecta* so widely in the color of the crown, ear coverts, and other particulars that it is very doubtful whether they are forms of a single species. The differences are best given in parallel columns:

<i>F. vinipecta</i>	<i>F. bieti</i>
Crown and nape, snuff brown.	Crown and nape, buffy brown.
Ear coverts, color of the crown.	Ear coverts, dull black.
Upper back, only lighter than the crown.	Upper back, light grayish-olive.
Lower back and rump, ochraceous tawny.	Lower back and rump, clay color.
General effect of the tail above, tawny olive.	General effect of the tail above, drab.
Belly and crissum, cinnamon-buff.	Belly and crissum of the same color as the chest.

101. *MOUPINIA POECILOTTIS SORDIDIOR* Rothschild

*Moupinia poecilottis sordidior* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 36  
(Likiang Range, Yunnan).

One male, four females, and one unsexed, Likiang Mountains, 11,000–12,000 feet, April, July, and August; one female between Likiang and Ganhaitze, 10,000 feet, May 19; one male, Hofuping Mountains, Mekong Valley, November.

This genus being unrepresented in the United States National Museum before, one of the specimens was forwarded to the Museum of Comparative Zoology to have Outram Bangs verify the identification. He writes: "The form does not seem to me as strongly marked as one might infer from the description. In our series from Tatsienlu, many are redder, but some almost match the skin sent."

Since the above series was received the Rev. David C. Graham has forwarded two poor skins taken at Sungpan and Wenchwan, northern Szechwan, localities considerably north of the type locality (Mupin). These seem to be a clearer white on the throat and chest than the Yunnan series and the superciliaries are whitish and the ear coverts reddish, not gray; above there seems to be little or no differences.

Eventually it will probably be necessary to remove this genus from the Timaliidae and place it in the Sylviidae. In external characters, at least, it is not far removed from *Suya* or *Prinia*.

102. *SCHOENIPARUS DUBIUS GENESTIERI* (Oustalet)

*Aleippe genestieri* OUSTALET, Bull. Mus. d'Hist. Nat. Paris, vol. 3, 1897,  
p. 210 (Tsekou).

Three males and three females, Likiang Mountains, 8,200–8,500 feet, June and August.

103. *SCHOENIPARUS DUBIUS INTERMEDIUS* Rippon

*Schoeniparus intermedius* RIPPON, Bull. Brit. Orn. Club, vol. 11, 1900, p. 11  
(Bhamo, Burma).

Two males and one female, Tseh Chung, Mekong Valley, November; two males, mountains near Yangtza, Mekong Valley, November; one male, Hofuping Mountains, Mekong Valley, November.

This series is quite distinct from the series I have identified as *S. d. genestieri*, and it is doubtful to my mind whether it would not be better to consider them distinct species. They are darker, more olive, not so rusty above and on the flanks; the black line above the superciliary is broader; the loreal streak is pronounced and blackish; the ear coverts much darker. Two or three of the specimens have the sides of the throat with a few rather obscure spots, but this seems to be entirely lacking in two of the males; it is probably only an



age character. As a matter of fact, the series more closely resembles a specimen of *S. d. mandellii* from Assam than it does *S. d. genestieri*. It is not quite so buffy on the throat and jugulum; the sides of neck are unstreaked, or nearly so; the bill is smaller; the back and tail are darker, more olive without so much of a reddish cast.

104. *STACHYRIDOPSIS RUFICEPS BHAMOENSIS* Harington

*Stachyridopsis ruficeps bhamoensis* HARRINGTON, Ann. and Mag. Nat. Hist., ser. 8, vol. 2, 1908, p. 245 (Bhamo, Burma).

One male, Linchia, March 12.

With only one specimen of *S. r. ruficeps* from Annam—possibly not the same as the Indian bird—it is hard to say exactly how they differ. The Annam bird is considerably smaller than the present specimen, more grayish on the back, and much lighter below. *Stachyridopsis praecognitus* (Swinhoe) is only a form of *S. r. ruficeps* with a somewhat smaller bill, more restricted crown patch, the back citrine not grayish or brownish, the lower parts more yellowish.

105. *HETEROXENICUS SINENSIS* (Rickett and La Touche)

*Brachypteryx sinensis* RICKETT and LA TOUCHE, Bull. Brit. Orn. Club, vol. 6, 1897, p. 1 (Kuatun, N. W. Fokien).

Five adult males, two immature males, and three females, Likiang Mountains, 10,000–12,000 feet, June–July.

The adult males in this series are much darker below than two males in the National Museum from Sikkim (*Heteroxenicus cruvalis*), especially on the breast and belly. In the Sikkim specimens the breast and belly are neutral gray, sparingly streaked and tinged with indigo, giving a bluish-gray cast. In certain particulars the Likiang specimens do not agree with Stuart Baker's<sup>27</sup> description.

The concealed part of the wings and tail are not "dark brown" but blackish or in the case of the tail, bluish. It may well be that they do not belong to the present species at all, but they agree better with it than they do with any other form attributed to China.

A specimen (296614) marked as a male is exactly like the adult female, except it has a silky-white superciliary. A still younger bird of the same sex in spotted plumage lacks the white superciliary.

A female taken in June (297038) is lighter on the back, the forehead, and lores, and has a slightly smaller bill than the others in the series and may not belong to this species at all, but I do not know at present where else to place it.

<sup>27</sup> Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 20.



## 106. LIOPTILA DESGODINSI (David and Oustalet)

*Sibia desgodinsi* DAVID and OUSTALET, Bull. Soc. Philom. Paris, ser. 7, vol. 1, 1877, p. 139 (Yer-ka-lo).

A fine series from: Heshwe, 10,000 feet, April 30; between Bayiwua and Heshwe, 10,000 feet, May 2; Likiang Mountains, 8,500–14,000 feet, April–August; Ngaza, east of Dyinaloko Mountain, 9,000 feet, June; Hofuping Mountains, Mekong Valley, November; Tseh Chung Mountains, Mekong Valley, November; Youngning Forests, February; Yunnan-Szechwan border, February.

The above series does not appear to differ from specimens from Szechwan. A young bird not long from the nest was taken in August. It does not differ from the adult, except in size.

## 107. SIVA CYANOPTERA WINGATEI Grant

*Siva wingatei* GRANT, Bull. Brit. Orn. Club, vol. 10, 1900, p. 38 (Yunnan City).

One female, Yünlung, March 22.

This specimen is considerably lighter brown above and much lighter below than any specimen in a series of five females from Suifu, Szechwan; it is also more streaked on the head.

## 108. SIVA STRIGULA YUNNANENSIS Rothschild

*Siva strigula yunnanensis* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 40 (Likiang Range, Yunnan).

A fine series of both sexes from: Between Likiang and Tuinakou (Yangbei Road), 10,000 feet, May 16; between Likiang and Ganhaitze, 10,000 feet, May 19; Likiang Mountains, 10,000–13,000 feet, April–August; Lameko Mountain, north of Lashipa, July; Tseh Chung Mountains, Mekong Valley, October; Hofuping Mountains, Mekong Valley, November; Mountains near Yangtza, Mekong Valley, November; Mili Forest, southwest Szechwan, February.

The birds taken in the fall have the whole lower parts, even the throat, deep yellow, the back olive drab. In spring and summer taken examples the back becomes deep olive gray; the pileum much brighter and more restricted; the throat grayish white, only the chin remaining yellow; the foreneck grayish; and the yellow of the lower parts much lighter and more restricted. In both styles the throat is barred with black. There are also other slight differences. The two plumages are very distinct and the change must take place at a rather early date, as it has been already assumed by a specimen taken as early as April 21, in rather unworn plumage; in the summer, when wear and fading have set in, the differences are still further accentuated.

## 109. YUHINA DIADEMATA Verreaux

*Yuhina diademata* VERREAUX, Nouv. Arch. Mus. Paris, vol. 5, Bull. 1869, p. 35 (Mupin).

A good series: High slopes of the Mekong Ridge above Tsao Chiang, March; Likiang Mountains, 9,400–14,000 feet, April–August; Hofuping Mountains, Mekong Valley, November; forests of Youngning, February.

Specimens in fresh unworn plumage are much darker than birds after they have begun to fade and wear. With only a few specimens from Szechwan (only one in good shape) for comparison, I follow Rothschild<sup>28</sup> in his disposition of *Yuhina ampelina* Rippon.

## 110. YUHINA GULARIS GRISEOTINCTA Rothschild

*Yuhina gularis griseotincta* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 42 (Shweli-Salwin Divide, Yunnan).

One female, Tengyueh Paofungssu, 5,600 feet, March 5.

## 111. YUHINA OCCIPITALIS OBSCURIOR Rothschild

*Yuhina occipitalis obscurior* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 42 (Likiang, Yunnan).

A good series: Cliffs of Mekong Valley, 11,000 feet, March 19; Lusuko (Mount Dyinaloko), 11,600 feet, April 27; Likiang Mountains, 11,000–12,000 feet, April–August.

## 112. LIOTHRIX LUTEUS YUNNANENSIS Rothschild

*Liothrix luteus yunnanensis* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 36 (Shweli-Salwin Divide, Yunnan).

Two males, Hofuping Mountains, November; one male, mountains near Yangtza, November.

This is a very different race from *L. l. luteus* of Szechwan and Hupeh Provinces. It is larger and much deeper in color above; the back overlaid with a yellowish wash, not simply dark gray; the lores and sides of head lemon yellow, instead of grayish; the throat and jugulum deeper yellow; the breast, belly, and under tail coverts light yellow instead of grayish white; the color of the wing deeper. In fact it is so different that I have my doubts but what it should not be accorded specific rank, except that good specimens of *L. l. calipygus* are not available for comparison.

## 113. PTERUTHIUS AEROLATUS RICKETTI (Grant)

*Pteruthius ricketti* GRANT, Bull. Brit. Orn. Club, vol. 14, 1904, p. 92 (S. China).

One female, forest of Chungai, 6,000 feet, March 14; one male, Mekong Valley, 8,000 feet, March 19; one male and one female,

<sup>28</sup> Nov. Zool., vol. 30, 1923, p. 258.

Likiang Mountains, July; one male, Hofuping Mountains, Mekong Valley, November; one male, Tseh Chung Mountains, Mekong Valley, November.

114. *PTERUTHIUS XANTHOCHLORIS PALLIDUS* (David)

*Allotrius xanthochloris*, var. *pallidus* DAVID, Nouv. Arch. Mus. Paris, vol. 7, 1871, p. 14 (Frontiers of Kookonor).

One female, Muang-hü-ko, east slopes of Likiang Mountains, July; two males and one female, mountains near Yangtza, Mekong Valley, November.

Family TROGLODYTIDAE. Wrens

115. *NANNUS TROGLODYTES TALIFUENSIS* (Sharpe)

*Anothura talifuensis* SHARPE, Bull. Brit. Orn. Club, vol. 13, 1902, p. 11 (Gyi-dzin-shan, Yunnan).

Two females and one unsexed, Likiang Mountains, 11,000–12,500 feet, April 8–15; one female, mountains near Yangtza, Mekong Valley, November.

Three males from western Szechwan are slightly darker. A male from Ichang, Hupeh, is considerably lighter than any in the Yunnan series. The ranges of the various forms in China do not seem to be very satisfactorily worked out.

116. *SPELAEORNIS SOULIEI* Oustalet

*Spelacornis souliei* OUSTALET, Bull. Mus. d'Hist. Nat., vol. 4, 1898, p. 257 (Tsekou).

One female, Hofuping Mountains, Mekong Valley, November.

This specimen does not agree with the figure of this species<sup>29</sup> or the description of the young.<sup>30</sup> As it is very close and the plumages or variations are so little known it would be unwise to provide it with a name at this time. The specimen may be described as follows:

Similar to Hartert's figure<sup>29</sup> cited above, but blackish terminal spots on head more pronounced; back much lighter (near sudan brown), the apical black spot more pronounced; auriculars sides of neck, flanks, and breast much lighter (ochraceous tawny), the black apical spot nearly obsolete; and the wing coverts narrowly barred with white, drab, and dusky.

It seems to be adult, but from the description of the young it may be a bird of the year not yet in fully adult plumage. It measures: Wing, 48; tail, 50; culmen, 10; tarsus, 20; middle toe, 13 mm.

<sup>29</sup> Nov. Zool., vol. 17, 1910, pl. 7, fig. 1.

<sup>30</sup> Idem, vol. 28, 1921, p. 25.

## 117. OLIGURA CASTANECORONATA CASTANECORONATA (Burton)

*Sylvia? castaneo-coronata* BURTON, Proc. Zool. Soc. Lond., 1835, p. 152 (Himalaya).

One male and three females, Likiang Mountains, June.

The only specimen available is a male from Sikkim. It is smaller, has a darker head, the back more of a warbler instead of olive-green, and the lower parts a deeper yellow when compared with the Yunnan series. Whether these differences would hold in a larger series is for the future to decide.

## Family CINCLIDAE. Dippers

## 118. CINCLUS CINCLUS CASHMERIENSIS Gould

*Cinclus cashmeriensis* GOULD, Proc. Zool. Soc. Lond., 1859, p. 494 (Kashmir).

One male, Likiang Mountains, 9,600 feet, April 18.

The above and a female from Sungpan, Szechwan, when compared with a series of three males and four females from Kashmir, are darker on the breast and belly and grayer on the back, with little or no brownish wash. They probably represent a distinct form, but which is better left unnamed for the present.

## 119. CINCLUS PALLASHI SOULIEI Oustalet

*Cinclus pallasi*, var. *souliei* OUSTALET, Ann. Soc. Nat. Zool., ser. 7, vol. 12, 1891 (1892), p. 299 (Tatsienlou and Mupin).

One female, Likiang Mountains, September; one female, Whei Hsi, October; one female, Hungfuping, Mekong Valley, November.

## Family TURDIDAE. Thrushes

## 120. MYOPHONUS TEMMINCKII EUGENEI Hume

*Myiophonus eugenei* HUME, Stray Feathers, vol. 1, 1873, p. 475 (Pegu).

One male, between Pakang and Wamangai, March 16; one male, between Yünlung and Tan-ten, March 23; two adult males, one immature male, and two unsexed, Likiang Mountains, 10,000-11,000 feet, May-August.

Besides the differences pointed out by Stuart Baker<sup>31</sup> between this and *M. t. temminckii*, the above series has larger, heavier bills; darker above and below; the blue more of a dusky violet-blue instead of dark soft bluish-violet; and the rump and belly without any white bases to the feathers. In fact, they are so different that I have serious doubts of the propriety of making them forms of one species.

The young was taken in August and is like the parents, but duller without the glistening blue spots or shoulder patch. It is rather

<sup>31</sup> Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 181.

unique for the young of a thrush to have an unspotted plumage, and this genus may not belong to the Turdidae at all, as claimed by the older ornithologists.

121. *GRANDALA COELICOLOR* Hodgson

*Grandala coelicolor* HODGSON, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 447 (Nepal).

Two adult males, Likiang Mountains, 12,000 feet, May 8, were taken after a late snow storm.

These are brighter colored than two Indian specimens, as remarked by Stuart Baker,<sup>32</sup> but they do not appear to be any smaller, in fact they have somewhat larger bills.

122. *TURDUS GOULDI* (Verreaux)

*Merula gouldi* VERREAUX, Nouv. Arch. Mus. d'Hist. Nat., vol. 6, 1871, p. 34 (W. Szechwan).

A fair series of adults and young from Tsao Chiang, March 18; Likiang Mountains, 10,000–15,000 feet, April, July, and August; Hofuping Mountains, Mekong Valley, November.

The males are very richly colored. The chief variation is in the color of the throat. In some specimens the chin and middle throat is spotted with white, while in others it is entirely lacking. The female is considerably paler than the male.

The young in various stages of the spotted plumage were taken in July and August.

123. *TURDUS RUFICOLLIS* Pallas

*Turdus ruficollis* PALLAS, Reise Russ. Reichs, vol 3, 1776, p. 694 (Dauria).

A small series of adults in various stages of plumage from: Near Feilung Chiao, March 20; between Lanping and Kanhoten, March 27; Kanhoten, March 28; Nguluko, 9,400 feet, April 5; Likiang Mountains, 12,500 feet, April 9; Likiang Plain, 9,000 feet, April 14; Youngning Plain, February; Mili Forests, Szechwan, February.

The females vary from a plumage hardly different from the males to one in which the throat and chest is only slightly mixed with rusty and much spotted with black. Apparently the full adult plumage is not acquired the first year.

124. *TURDUS EUNOMUS* Temminck

*Turdus eunomus* TEMMINCK, Pl. Col., pl. 514, 1831 (Japan).

One female, between Pakang and Wamangai, March 16; one male, Mili Forests, 12,000, February.

<sup>32</sup> Fauna Brit. India, Birds, 2 ed., vol. 2, 1924, p. 90.



125. *TURDUS MUPINENSIS CONQUISITUS* Bangs

*Turdus auritus conquisitus* BANGS, Bull. Amer. Mus. Nat. Hist., vol. 44, 1921, p. 591 (Likiang Mts., Yunnan).

One adult female, two immature males, and three immature females, Likiang Mountains, 9,600 feet, April, July, and August.

126. *MONTICOLA SOLITARIA PANDOO* (Sykes)

*Petrocincla pandoo* SYKES, Proc. Zool. Soc. Lond., 1832, p. 87 (Western Ghats).

Five males and five females from: Feilung Chiao, March 20; Chien-chuan and vicinity, 8,000 feet, May 29–June 5; Yangtze Gorge, 7,000 feet, May 22–23; Ndagu, Yangtze, 7,600 feet, June; Tseh Chung Mountains, Mekong Valley, November.

Stuart Baker<sup>33</sup> gives *Monticola solitaria affinis* as the form of this thrush occurring in western China, but none of the specimens above have any chestnut on the wings which is said to characterize that race, or do specimens from western Szechwan. Rothschild<sup>34</sup> in his various papers on Yunnan birds has assigned his birds to *pandoo*, also.

127. *MONTICOLA ERYTHROGASTRA* (Vigors)

*Turdus erythrogaster* VIGORS, Proc. Zool. Soc. Lond., 1831, p. 171 (Himalayas).

Five adult males, four adult females, and one immature female, Likiang Mountains, July–August.

The altitude indicated upon one specimen is 15,000 feet.

The immature not fully grown was taken in August.

128. *CHAIMARRHORNIS LEUCOCEPHALA* (Vigors)

*Phoenicura leucocephala* VIGORS, Proc. Zool. Soc. Lond., 1830, p. 35 (Himalayas).

A large series of adults from: Tengyueh Plain, 5,300 feet, March 7; Likiang Mountains, 9,600–11,000 feet, April 20–May 11, and September; Whei Hsi, Mekong Valley, October; Tseh Chung Mountains, Mekong Valley, November; Yangtza, Mekong Valley, November; Hofuping Mountains, Mekong Valley, November; Youngning Plain, 10,000 feet, January–February.

Chinese birds seem to be a little deeper in color than the few specimens from northwest India available for comparison.

129. *PHOENICURUS AUROREUS LEUCOPTERUS* Blyth

*Phoenicura leucoptera* BLYTH, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 962 (Malacca).

One male, between Pakang and Wamangai, March 16; one adult male, one adult female, and two young, Likiang Mountains, 11,000

<sup>33</sup> Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 175.

<sup>34</sup> Nov. Zool., vol. 28, 1921, p. 30; vol. 30, 1923, pp. 42, 255.



feet, April and August; one female, Tseh Chung Mountains, Mekong Valley, November; one male, mountain above Hunfuping, Mekong Valley, November.

The two young fully grown but still in the spotted plumage were taken in August.

The males have deeper black throats and backs and the breast more of a mars yellow than *P. a. aureoreus*.

#### 130. PHOENICURUS SCHISTICEPS (Gray)

*Ruticilla schisticeps* GRAY, Cat. Mamm. Bds. Nepal Coll. Hodgson, 1846, pp. 69, 153 (Nepal).

One adult and one immature female, Likiang Mountains, 11,000–12,000 feet, April 15 and June; one adult male, Whei Hsi Mountains, November; one adult female, plain of Youngning, 11,000 feet, February; three adult males, forests of Mili, 12,000 feet, February.

#### 131. PHOENICURUS HODGSONI (Moore)

*Ruticilla hodgsoni* MOORE, Proc. Zool. Soc. Lond., 1854, p. 26, pl. 58 (Nepal).

One female, Tengyueh, 5,600 feet, March 5; two males, between Tan-ten and Ssuching, March 24; one male and one female, Likiang Mountains, 9,500–9,600 feet, April 20 and 23; one male and two females, Tseh Chung Mountains, Mekong Valley, November; two males, Hofuping Mountains, Mekong Valley, November; one male, forests of Mili, 9,000–10,000 feet, Szechwan, February.

#### 132. PHOENICURUS FRONTALIS SINAE Hartert

*Phoenicurus frontalis sinae* HARTERT, Bull. Brit. Orn. Club, vol. 38, 1919, p. 78 (Kansu).

One male, Kanhoten, Yünlooshan Range, March 29; one male, Nguluko, 9,500 feet, April 20; two males, three females, and one immature, Likiang Mountains, 9,500–15,000 feet, April–June and August; four adult males and two immature males, Yangtza Mountains, Mekong Valley, November.

An immature in the spotted plumage was taken in August. The two immature males taken in November have a distinctive plumage from the adult female; they are browner above, the throat and chest buckthorn brown, becoming yellow ocher on the breast and belly, and the rump and base of the outer tail feathers deeper (xanthine orange). Evidently the adult plumage is not assumed until spring. The males taken in autumn have the blue areas with rusty edges to the feathers.

#### 133. RHYACORNIS FULIGINOSA FULIGINOSA (Vigors)

*Phoenicura fuliginosa* VIGORS, Proc. Zool. Soc. Lond., 1831, p. 35 (Himalaya).

A fair series of adults and one immature from borders of Feilung-chiao, March 27; Nachupa Plain, 8,000 feet, May 30; Likiang Moun-

tains, 9,000–10,000 feet, June and September; Likiang Plain, 8,200 feet, August; Tseh Chung Mountains, Mekong Valley, November.

Two males in the National Museum from Fukien are much lighter in color and the wings browner than any in a large series from western China. They agree fairly well with a specimen from Formosa, but are even lighter. They belong either to *R. f. affinis* of Formosa or the form recently described by Stresemann<sup>35</sup> as *Chimarrornis fuliginosa tenuirostris*.

An immature female, taken May 30, is similar to the adult, but is more buffy below, the back darker with still darker margins to the feathers and occasional narrow buffy shaft streaks, the wing coverts with larger and deeper buff spots, and the tail with much more white.

#### 134. HODGSONIUS PHOENICUROIDES PHOENICUROIDES (Gray)

*Bradypterus phoenicuroides* GRAY (ex Hodgson MS.), Cat. Mamm. and Bds. Nepal, 1846, pp. 70, 153 (Nepal).

A good series of adults: Likiang Mountains, 13,000–15,000 feet, June–July.

The only Indian specimens available for comparison are too old and faded to be of any value for this purpose, but Stuart Baker (Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 21) assigns Yunnan birds to this race.

#### 135. CALLIOPE TSCHEBAIEWI Przewalski

*Calliope tschebaiewi* PRZEWALSKI, Mongol. i. Strana Tangut., vol. 2, 1876, p. 44, pl. 9, fig. 1 (Mountains of Kansu); Rowley's Orn. Misc., vol. 2, pt. 6, 1877, p. 180, pl. 54, fig. 1.

One adult male between Bayiwua and Heshwe, 10,000 feet, May 2; one adult and one immature male, Mount Dyinaloko, Likiang Mountains, 12,000–13,000 feet, June.

The immature has just begun to assume the red throat of the adult.

#### 136. CALLIOPE DAVIDI GLORIOSA (Sushkin)

*Luscinia davidi gloriosa* SUSHKIN, Auk, vol. 43, 1926, p. 181 (Likiang Mts., Yunnan, China).

Five adult males, one immature male, and one adult female, Likiang Mountains, 9,500–10,000 feet, May, July, and September.

Of the female I have been unable to find any description, though this sex has been sent to Tring and reported upon by Rothschild.<sup>36</sup> The specimen that I take to be the adult female is marked as a male. It is slightly smaller than the male and quite different in general appearance, but the pattern of the tail is the same and the whitish

<sup>35</sup> Journ. für Orn., 1923, p. 364 (Siuhang, Kwangtung).

<sup>36</sup> Nov. Zool., vol. 30, 1923, p. 253.

feathers on the sides of the neck are present. Above it is like the male, but lacks the black frons; the lower parts and cheeks are a light cinnamon buff, becoming albescent on the belly.

The immature male is nearly full grown but still in the spotted plumage. It was taken in July.

One of these specimens was exchanged with the Russian Academy of Sciences after the above was written, and Dr. Peter Sushkin has compared it lately in Paris with the type of *Calliope davidi* Oustalet and found it to be different.

#### 137. IANTHIA RUFILATA PRACTICA Bangs and Phillips

*Ianthia practica* BANGS and PHILLIPS, Bull. Mus. Comp. Zool., vol. 58, 1914, p. 292 (Loukouchai, Yunnan).

One adult male and two females, Likiang Mountains, 11,000–14,000 feet, April 12–18; five females, Hofuping Mountains, Mekong Valley, November.

The females are more olive brown above and are apparently slightly larger than *Ianthia cyanura*; they are also more brown, not so gray above, as summer specimens of *Ianthia rufilata*, with which they do not seem to agree in size. The more grayish plumage of the summer specimens being due to fading and wear.

The United States National Museum contains a pair of this species from Taipeishan District, Shensi, the male of which is lighter blue above and has the rump, frontal band, and lesser wing coverts much lighter. It probably represents a distinct form.

#### 138. TARSIGER CHRYSÆUS CHRYSÆUS Hodgson

*Tarsiger chrysaeus* HODGSON, Proc. Zool. Soc. Lond., 1845, p. 28 (Nepal).

One adult male, two adult females, and three immature males, Likiang Mountains, 10,000–12,000 feet, June–September.

Two of the immatures are almost identical with the adult female, except they are a little brighter; the third immature has the feathers of the lower parts narrowly edged with dusky.

Stresemann<sup>37</sup> has named a form from Washan, Szechwan, *Tarsiger chrysaeus vitellinus*. I have a poor male from near Tatsienlu. It is a little brighter and has a smaller bill than the Yunnan male, but without any specimens from India for comparison I prefer to leave the Chinese form where other writers have for the present.

#### 139. LARVIVORA BRUNNEA BRUNNEA Hodgson

*Larvivora brunnea* HODGSON, Journ. Asiatic Soc. Bengal, vol. 6, 1837, p. 102 (Nepal).

Seven adult males, two adult females, and two immatures from various stations in the Likiang Mountains, 8,000–10,000 feet, May–August.

<sup>37</sup> Journ. für Orn., 1923, p. 365.

Two adult males from Kashmir are slightly darker above and below and have wider white superciliaries.

The two immatures are in two stages of the spotted plumage; the younger bird browner above the spots above and below yellow ochre and the belly almost solidly of this color; the older bird is much grayer above with few or no spotting; the spots below whitish and the belly almost wholly so. The yellowish spotted bird is marked as a male and the white spotted bird as a female, but the differences are hardly sexual. They were taken in July.

140. *COPSYCHUS SAULARIS SAULARIS* (Linnaeus)

*Gracula saularis* LINNAEUS, Sys. Nat., ed. 12, 1766, p. 165 (Bengal).

One male, Yünlung, March 22; three males and four females without definite locality.

141. *SAXICOLA TORQUATA PRZEWALSKII* (Pleske)

*Prantincola maura*, var. *przewalskii* PLESKE, Wiss. Res. Przewalsky's Reisen, Vögel, vol. 1, 1889, p. 46, pl. 4, figs. 1, 2, 3 (Kansu).

A large series of adults and immatures from: Hungai, March 11; between Wamangai and Tsao Chiang, March 17; Tsao Chiang, March 18; between Feilung-chiao and Yünlung, March 21; between Yünlung and Tanten, March 23; between Lanping and Kanhoten, March 27; Yangtze Gorge, 7,400 feet, May 20-23; Lashipa Plain, 8,600 feet, May 27; Likiang Mountains, 8,200-12,000 feet, May-September; between Kanhoten and Shayangching, 8,600 feet, June 4; Tseh Chung Mountains, Mekong Valley, November; Hofuping Mountains, Mekong Valley, November; Forests of Youngning, February.

This is somewhat larger and considerably richer colored than *Saxicola torquata stejnegeri*.

Two young in the spotted plumage were taken in July and August; the latter considerably older is molting into the fall plumage.

142. *SAXICOLA CAPRATA BURMANICA* Baker

*Saxicola caprata burmanica* BAKER, Bull. Brit. Orn. Club, vol. 43, 1922, p. 19 (Pegu).

One male, without definite locality.

143. *OREICOLA FERREA HARINGTONI* Hartert

*Oreicola ferrea haringtoni* HARTERT, Vögel paläarkt. Fauna, vol. 1, Heft 6, 1910, p. 711 (Lien-kiang bei Futschau, China).

A good series of adults and young from: Huigai, March 11; between Wamangai and Tsao Chiang, March 17; between Feilung-chiao and Yünlung, March 21; Lashipa Plain, 8,600 feet, May 27;

Likiang Mountains, 10,000–12,000 feet, May–September; Likiang Plain, 8,200 feet, August; Tseh Chung Mountains, Mekong Valley, October–November; Yetcha, Mekong Valley, November.

Young in the spotted plumage were taken in August.

144. *OREOCINCLA MOLLISSIMA MOLLISSIMA* (Blyth)

*Turdus mollissimus* BLYTH, Journ. Asiatic Soc. Bengal, vol. 2, 1842, p. 188 (Darjeeling).

One female, Likiang Mountains, May 8.

145. *LAISCOPUS COLLARIS RIPIONI* (Hartert)

*Prunella collaris ripioni* HARTERT, Vögel paläark. Fauna, vol. 1, Heft 6, 1910, p. 766 (Gyi-dzin-shan).

Three males and two females, Likiang Mountains, 10,000–16,500 feet, May, June, and August.

146. *PRUNELLA STROPHIATA MULTISTRIATA* (David)

*Accentor multistriatus* DAVID, Ann. and Mag. Nat. Hist., ser. 4, vol. 7, 1871, p. 256 (Mupin).

A good series from: Likiang Mountains, 9,600–14,000 feet, April–August; Tseh Chung Mountains, Mekong Valley, November; Hofufing Mountains, Mekong Valley, November; Litiping Mountains, Mekong-Yangtze Divide, November.

147. *PRUNELLA IMMACULATA* (Hodgson)

*Accentor immaculatus* HODGSON, Proc. Zool. Soc. Lond., 1845, p. 34 (Nepal).

Two males and two females, Likiang Mountains, 9,500–10,000 feet, April 19–23; one male, forest of Youngning-Mili, February.

Family ENICURIDAE. Fork-tails

148. *ENICURUS LESCHENAULTI SINENSIS* Gould

*Enicurus sinensis* GOULD, Proc. Zool. Soc. Lond., 1865, p. 665 (Shanghai).

One male and two females, Likiang Mountains, April, June, and August; one male and one female, between Lanping and Lachiming, June 11; one male, Ashi, banks of Yangtze, July; one immature male, Likiang, 8,200 feet, August 23; male and female, Mili, Szechwan, February.

149. *MICROCICHLA SCOULERI SCOULERI* (Vigors)

*Enicurus scouleri* VIGORS, Proc. Zool. Soc. Lond., 1830, p. 174 (Himalaya).

One male, Yantza Mountains, Mekong Valley, November.



## Family SYLVIIDAE. Warblers

150. *DUMETICOLA THORACICA THORACICA* Blyth

*Dumeticola thoracica* BLYTH, Journ. Asiatic Soc. Bengal, vol. 14, 1846, p. 584 (Nepal).

A fair series, Likiang Mountains, 12,000 feet, June–August.

Four immature birds taken in August and September are darker above than the adult and have the lower parts marguerite yellow, the flanks light brownish olive, the foreneck and chest spotted with buffy-olive, the under tail coverts olive with yellowish margins.

151. *TRIBURA TACZANOWSKIA* (Swinhoe)

*Locustella taczanowskia* SWINHOE, Proc. Zool. Soc. Lond., 1871, p. 355 (Trans-Baikal).

One male, Likiang Mountains, 12,000 feet, May 12.

This specimen has a few almost obsolete dusky spots on the chest. Stuart Baker<sup>38</sup> in his description does not mention these. The specimen is very much like *T. major*, except for its much smaller bill. It is more of a brownish olive on the back and the spots on the chest are fewer in number, lighter, and almost obsolescent. I have no specimens of *T. taczanowskia* for comparison.

152. *FRANKLINIA GRACILIS* (Franklin)

*Prinia gracilis* FRANKLIN, Proc. Zool. Soc. Lond., 1831, p. 119 (Vindhyan Hills).

One male, Yangtze Gorge, 4,800 feet, May 17.

153. *ACANTHOPNEUSTE MAGNIROSTRIS* (Blyth)

*Phylloscopus magnirostris* BLYTH, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 966 (Calcutta).

Three males and three females, Likiang Mountains, 12,000 feet, May, June, and August; one male, Baiywua, 10,000 feet, June; one female, Likiang Plain, 8,200 feet, August.

One of the females taken in August is brighter, more yellowish green above, more tinged with yellow below, the superciliary and wing band deeper and more pronounced. The bill is slightly smaller. I take it to be a bird of the year in fresh autumnal plumage.

154. *ACANTHOPNEUSTE REGULOIDES CLAUDIAE* La Touche

*Acanthopneuste trochiloides claudiae* LA TOUCHE, Bull. Brit. Orn. Club, vol. 43, 1922, p. 22 (Mengtze, Yunnan).

Three males, five females, and three unsexed, Likiang Mountains, 9,600–12,000 feet, April–August; one male, without locality, March 25.

I am not satisfied that the above series has been correctly determined. They are very close to a rather poor specimen from Nepal;

<sup>38</sup> Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 404.

in fact, I can not detect any appreciable difference between them. A male from Shensi and another from Hupeh are not so strongly tinged with yellow below, the occipital dark mark is darker; they evidently represent a different form that for the present I do not wish to add to the confusion by naming.

Stresemann<sup>39</sup> has written a review and without more material it would be wise to accept his conclusions.

155. *REGULOIDES HUMII PRAEMIUM* Mathews and Iredale

*Reguloides humii praemium* MATHEWS and IREDALE, AUS. AV. RECORD, vol. 3, 1915, p. 45 (Russia).

One male, Likiang, 8,200 feet, May 15.

This specimen is in a bad state of preservation. The wing bars are almost worn off; only the bar on the greater wing coverts shows faintly. Above it is more greenish and below more tinged with yellowish than the majority of specimens from east China. It is quite possible that it does not belong to this form at all, but I do not know where else to place it.

156. *REGULOIDES PROREGULUS FORRESTI* (Rothschild)

*Phylloscopus proregulus forresti* ROTHSCILD, NOV. Zool., vol. 28, 1921, p. 45 (Likiang Range, Yunnan).

One unsexed, Nguluku, April 13; two females, Likiang Mountains, 11,000 feet, April and June.

157. *REGULOIDES PULCHER PULCHER* (Blyth)

*Phylloscopus pulcher* BLYTH, Journ. Asiatic Soc. Bengal, vol. 14, 1845, p. 592 (Nepal).

One male and one female, Likiang Mountains, 12,000 feet, April and July; one male, Tseh Chung Mountains, Mekong Valley, October; one male, mountains near Yangtza, Mekong Valley, November; two males and one female, Hofuping Mountains, Mekong Valley, November.

158. *OREOPNEUSTE ARMANDI* (Milne-Edwards)

*Abrornis armandi* MILNE-EDWARDS, Nouv. Arch. Mus. Paris, vol. 1, Bull. 1865, p. 22, pl. 2, fig. 1 (N. China).

One unsexed, Heshwe, 10,000 feet, May 2; one female, Bayiwua, east of Likiang Mountains, June; two males and four females, Likiang Mountains, 11,000–12,000 feet, May, June, and September.

This species I failed to recognize from the poor descriptions consulted and sent three of the above specimens to Outram Bangs, who kindly identified them. The English ornithologists compare it in their descriptions with *Oreopneuste fuscata*, a species which it

<sup>39</sup> Orn. Monatsb., vol. 32, 1924, pp. 8–9.

is extremely doubtful belongs in the same genus. The latter has a proportionally shorter tail in relation to the wing. *Oreopneuste davidii* Swinhoe (= *Abroornis armandi* Milne-Edwards) is the type of *Oreopneuste* Swinhoe by monotypy. *Phaeorhadina* has been proposed by the Mathews and Iredale<sup>40</sup> for *Phyllopnuste fuscata* Blyth, but whether the other species (except *armandi*) placed in *Oreopneuste* by Sharpe<sup>41</sup> really belong with *fuscata* I am not prepared to say; they are very similar in structure so far as I have examined them, however, except *Phylloscopus neglectus* Hume, which belongs in *Acanthopneuste*. *Horornis* Hodgson as usually constituted is also in need of revision, it seems to me. The present species bears a striking resemblance in coloration to *Horornis acanthizoides*; it is a larger bird, however. *Horornis* has only 10 tail feathers, while *Oreopneuste* has 12; otherwise they are structurally much alike, but owing to this difference had better be kept separate.

As descriptions in English of this species are poor, a few notes on the plumages may be of help to other investigators. The May and June taken birds are light-brownish olive on the upper parts, a little deeper on the top of the head; superciliary stripe extending to nape, marguerite yellow; loreal and postocular streaks darker than top of head; cheeks and sides of neck, deep olive-buff with a cinnamon wash; throat and foreneck grayish white with sparse light yellow streaks; chest, breast, and belly barium yellow, with sparse grayish white and buffy olive streaks; under tail coverts, naples yellow.

The fall-taken birds are buffy olive above or deeper; the superciliary is deeper yellow; the throat and foreneck with an increase of yellowish streakings; the chest, breast, and belly a deeper yellow, with a few whitish streaks; under tail coverts honey yellow; the flanks suffused with ecru-drab.

The June birds in worn plumage taken in the Likiang Mountains would seem to indicate it was a summer resident there. It was originally described from north China. It may be the Yunnan birds are not the same, which might account for the discrepancies in the descriptions. I have been unable to compare them.

#### 159. PHAEORHADINA FUSCATA FUSCATA (Blyth)

*Phyllopnuste fuscata* BLYTH, Journ. Asiatic Soc. Bengal, vol. 11, 1842, p. 113 (Calcutta).

One unsexed, Heshwe, 9,600 feet, April 30; one female, Likiang Mountains, 11,000 feet, September; one female, Whei Hsi Mountains, October–November.

The unsexed specimen from Heshwe is considerably larger, darker above, and lighter below than the two females. It may be a male.

<sup>40</sup> Aus. av. Record, vol. 3, 1917, p. 116.

<sup>41</sup> Hand-List, vol. 4, 1903, p. 214.

## 160. PHAEORHADINA SUBAFFINIS (Grant)

*Orcopneuste subaffinis* GRANT, Bull. Brit. Orn. Club, vol. 10, 1900, p. 37  
(Pu-an-ting, S. W. Kweichu).

One male, between Tsao Chiang, March 17; one male, two females, and one unsexed, Likiang Mountains, 10,000–11,000 feet, April 8–June.

This closely resembles *P. affinis*, but the chest is strongly tinged with ochraceous and it is a trifle smaller. If the two birds did not apparently breed together they would only be considered forms of one species. It is quite possible they may occupy different levels in the breeding seasons.

## 161. PHAEORHADINA AFFINIS (Tickell)

*Motacilla affinis* TICKELL, Journ. Asiatic Soc. Bengal, vol. 2, 1833, p. 576  
(Jungles of Borabhum and Dholbum).

Three females and one unsexed, Likiang Mountains, 8,200–12,000 feet, April 20–May 15; one female, Hofuping Mountains, Mekong Valley, November.

The lower parts vary from a lemon to a pieric yellow.

## 162. HOREITES BRUNNIFRONS UMBRATICUS Baker

*Horcites brunnifrons umbraticus* BAKER, Bull. Brit. Orn. Club, vol. 44, 1924, p. 63 (Sheweli-Salwin Divide, Yunnan).

One male and two females, Likiang Mountains, 10–12,000 feet June, August, and September.

163. SEICERCUS<sup>42</sup> BURKII TEPHIROCEPHALUS (Anderson)

*Culicipeta tephrocephalus* ANDERSON, Proc. Zool. Soc. Lond., 1871, p. 213  
(Bhamo, Burma).

One adult unsexed, between Likiang and Tuinakou, 10,000 feet, May 16; five males and two females, Likiang Mountains, 10,000–11,000 feet, May–August.

An immature female taken in July and an immature male taken in August of about the same size as the adult lack the gray median stripe of the head, it being olive like the back; the backs are more of a citrine; the lower parts are lighter; and the bill is tipped with yellow.

In this plumage they resemble *S. b. burkii* but are not such a deep yellow below. The August specimen is molting into the bright yellow breast of the adult.

<sup>42</sup> For the use of *Seicercus* in place of *Cryptolopha*, see Baker, Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 485.

164. *SUYA CRINIGERA YUNNANENSIS* Harington

*Suya crinigera yunnanensis* HARRINGTON, Bull. Brit. Orn. Club, vol. 31, 1913, p. 110 (Yunnan).

One male, Yangtze gorge, 4,600 feet, May 17; one male and one female, Likiang Mountains, 8,500 feet, July and August; one adult without definite locality.

The series of this species at my command is much too small to reach any definite conclusions regarding the numerous races into which it has been divided. Birds from Fukien and Hunan (*Suya crinigera purumstriata* David) are browner and less streaked above and less tinged with buffy below when compared with the Yunnan series.

165. *SUYA SUPERCILIARIS SUPERCILIARIS* Anderson

*Suya superciliaris* ANDERSON, Zool. Res. Two Exp. Western Yunnan, 1878, p. 642, pl. 51, fig. 1 (Momien).

One male, Tsaio Chiang, March 18.

Two males from the Langbian Peaks, south Annam, are considerably darker above.

## Family REGULIDAE. Kinglets

166. *REGULUS REGULUS YUNNANENSIS* Rippon

*Regulus yunnanensis* RIPPON, Bull. Brit. Orn. Club, vol. 19, 1906, p. 19 (Yangtze R., W. Yunnan).

One male, Hofuping Mountains, Mekong Valley, November; one male, Tseh Chung Mountains, Mekong Valley, November.

167. *SYLVIPARUS MODESTUS SATURATIONIOR* Rippon

*Sylviparus saturationior* RIPPON, Bull. Brit. Orn. Club, vol. 16, 1906, p. 87 (Mt. Victoria, Chin Hills).

One male, between Lanping and Kanhoten, March 27; one female, without definite locality, March 25; one unsexed, Likiang Mountains, 11,000 feet, April 15; one male and one female, mountains near Yangtza, Mekong Valley, November; one male, Hofuping Mountains, Mekong Valley, November.

## Family PRIONOPIDAE. Wood Shrikes

168. *HEMIPUS PICATUS CAPITALIS* (McClelland)

*Muscicapa ? capitalis* McCLELLAND, Proc. Zool. Soc., 1839, p. 157 (Assam).

One male, Kantingai (four days north of Tenyueh), 2,600 feet, March 18.



## Family LANIIDAE. Shrikes

## 169. LANIUS TEPHRONOTUS (Vigors)

*Collurio tephronotus* VIGORS, Proc. Zool. Soc. Lond., 1831, p. 43 (Himalaya).

A good series from: Tsao Chiang, March 18; Likiang Plain, 9,400 feet, May 4; Likiang, 8,200 feet, May 15; between Likiang and Ganhaitze, 10,000 feet, May 19; Likiang Mountains, 9,500–11,000 feet, April 23–September; Limestone Range, east of the Likiang Mountains, 10,000 feet, July 2; Whei Hsi Mountains, Mekong Valley, November; Tseh Chung Mountains, Mekong Valley, November.

Specimens in worn plumage have the gray of the back darker and the red of the rump lighter than birds in unworn plumage.

One specimen (297168) has a white line bordering the black mark from just forward of the eye to near the end of the ear coverts, and there is a slight indication of it in one or two other specimens.

## 170. LANIUS NIGRICEPS NIGRICEPS (Franklin)

*Collurio nigriceps* FRANKLIN, Proc. Zool. Soc. Lond., 1831, p. 117 (Ganges and Nerbudda).

One female, between Pakang and Wamangai, March 16; one female, Tsao Chiang, March 18.

## 171. LANIUS CRISTATUS CRISTATUS Linnaeus

*Lanius cristatus* LINNAEUS, Sys. Nat., ed. 10, 1758, p. 93 (Bengal).

Two immature males, Likiang Mountains, 8,500 feet, August and September.

## Family PARADOXORNITHIDAE. Parrot-bills

## 172. PARADOXORNIS GUTTATICOLLIS David

*Paradoxornis guttaticollis* DAVID, Nouv. Arch. Mus. Paris, vol. 7, Bull. 1871, p. 14 (Szechwan and Mupin).

One female, without locality.

The black of the ear coverts is more extensive and the spotting on the chest more pronounced than in a female from Fukien, the only specimen with which I have been able to compare it.

## 173. SUTHORA UNICOLOR SATURATIO (Rothschild)

*Paradoxornis unicolor saturatio* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 54 (Sheweli-Salwin Divide, Yunnan).

Two adults, between Dyinaloko and Bayiwua, May 1; three males and two females, east slopes Likiang Mountains, July; one male, west slopes of Likiang Mountains, July.

## 174. SUTHORA WEBBIANA RICKETTI (Rothschild)

*Paradoxornis webbiana ricketti* ROTHSCHILD, Bull. Brit. Orn. Club, vol. 43, 1922, p. 11 (Yangtze Valley, Yunnan).

One male, between Yulo and Likiang, west slopes of the mountains, 9,000 feet, May 24.

This is so very different from *Suthora webbiana* that I have grave doubts if it should be made a race of this species, but not having specimens of *Suthora styani* Rippon I prefer to leave it in abeyance for the present.

## 175. SUTHORA FULVIFRONS CYANOPHRYS David

*Suthora cyanophrys* DAVID, Journ. trois Voy. Emp. Chin., vol. 1, 1875, p. 345 (Chensi meridian).

Two females and one unsexed, Likiang Mountains, 10,000–12,000 feet, April and June.

## Family PARIDAE. Chickadees

## 176. PENTHSTES PALUSTRIS DEJEANI Oustalet

*Parus dejeani* OUSTALET, Bull. Mus. Paris, vol. 3, 1897, p. 209 (Ta-t sien-lu).

One male Peshwe-ho, Likiang Mountains, 11,000 feet, April 25.

The United States National Museum has recently received a male specimen from Shanghai taken February 26, without a bill, that does not differ from the Yunnan bird essentially; it is probably only a winter straggler.

## 177. BAEOLOPHUS DICHROUS WELLSI (Baker)

*Parus dichrous wellsi* BAKER, Bull. Brit. Orn. Club, vol. 38, 1917, p. 8 (Yangtze big bend, W. Yunnan).

A fair series of adults from: Likiang Mountains, 10,000–12,000 feet, April–July; Mount Dyinaloko, 12,000 feet, April 29; Tseh Chung Mountains, Mekong Valley, November; mountains near Yangtza, Mekong Valley, November; mountains of Hofuping-Yangtza, November.

This race is a darker, clearer gray above and lighter below than the only specimen of *B. d. dichrous*, with which it has been compared.

## 178. PERIPARUS ATER AEMODIUS (Hodgson)

*Parus aemodius* HODGSON, Journ. Asiatic Soc. Bengal, vol. 13, 1844, p. 943 (Nepal).

One adult male, Likiang Mountains, 14,000–15,000 feet, April 16.

## 179. PERIPARUS RUFONUCHALIS BEAVANI (Jerdon)

*Lophophanes beavani* JERDON (Blyth Ms.) Birds India, vol. 2, 1863, p. 275 (Mt. Tonglloo, Sikkim).

Two males and one unsexed, Likiang Mountains, 10,000–12,000 feet, April; one male, Tseh Chung Mountains, November; one female, forests of Younging, February.

180. *PARUS MAJOR TIBETANUS* Hartert

*Parus major tibetanus* HARTERT, Vögel paläark. Fauna, vol. 1, Heft 3, 1905, p. 346 (Chaksam, Tsongpo Valley, Tibet).

A small series of adults and young between Pakang and Wamangai, March 16; Nguluko, 10,000 feet, April 6 and 7; Likiang Mountains, 8,500–10,000 feet, April and June; between Dyinaloko and Baiwua, 11,000 feet, May 2; Yangtza Mountains, Mekong Valley, November.

Larger, with less yellow on the mantle; outer tail feather more extensively white than in forms to the north and east of it. So many forms have been named from China within recent years that it is difficult to decide which are valid without a more intensive study than I am able to devote to it.

181. *PARUS MONTICOLUS YUNNANENSIS* La Touche

*Parus monticolus yunnanensis* LA TOUCHE, Bull. Brit. Orn. Club, vol. 42, 1922, p. 51 (Milati, Yunnan).

Seven adults, Likiang Mountains, 10,000–11,000 feet, April–September.

This series when compared with a small series from Kashmir has the white markings on the wings less marked, the lower back and rump a deeper, clearer gray, and it appears to be slightly larger in size.

182. *AEGITHALISCUS CONCINNUS TALIFUENSIS* Rippon

*Aegithaliscus talifuensis* RIPPON, Bull. Brit. Orn. Club, vol. 14, 1903, p. 18 (Gyi-dzin-shan, east of Talifu, Yunnan).

One adult, Yünlung, March 22; one adult, Lashipa, June 6; one adult female, Likiang Plain, 8,200 feet, August 21.

This does not seem to be a well-marked race, but Rothschild<sup>43</sup> and La Touche<sup>44</sup> with more ample material recognize it. The pectoral band is darker and narrower than in birds from central and eastern China. A series from Suifu, Szechwan, seems to agree with the eastern race.

183. *AEGITHALISCUS BONVALOTI* (Oustalet)

*Acredula bonvaloti* OUSTALET, Ann. Sci. Nat., Zool., ser. 7, vol. 12, 1891, p. 286, pl. 9, fig. 1 (Ta-t sien-lu and Pendjama, Szechwan).

Nine adults and one immature from Likiang Mountains, 9,600–12,000 feet, April–June; between Likiang and Tuinakou, 10,000 feet, May 16; and Hofuping Mountains, Mekong Valley, November.

<sup>43</sup> Nov. Zool., vol. 30, 1923, p. 51.

<sup>44</sup> Ibis, 1923, p. 311.

The single specimen from the last locality is a female and much darker on the chest, ear coverts, and nuchal region than any others in the series and may represent another race.

The specimen I have listed above as the immature is quite distinct from the adult. It is cream-buff below; the chest crossed by a band of black spots; the throat with two narrow black lines from the chin; the nuchal and auricular region much lighter than in the adult; and the feet (in the skin) honey yellow instead of blackish brown. It is quite a different looking bird from the adult, but if not the young of this species, I do not know where to place it.

184. *AEGITHALOS CAUDATUS VINACEUS* (Verreaux)

*Mecistura vinacea* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull., 1870, p. 39 (Ourato).

One male and one female, Lashipa Plain, 8,500 feet, May 28.

This seems to be considerably south of the published range of this form.

Family SITTIDAE. Nuthatches

185. *SITTA SINENSIS NEBULOSA* La Touche

*Sitta europaea nebulosa* LA TOUCHE, Bull. Brit. Orn. Club, vol. 42, 1922, p. 55 (new name for *Sitta europaea obscura* La Touche, preoccupied; Milati, Yunnan).

A good series of adults: Likiang Mountains, 8,200–15,000 feet, April–September; near Tsilikiang, Yangtze Valley, 5,000–6,000 feet, May 17; between Ganhaitze and Yangtze Gorge, 9,000 feet, May 20; mountains near Yangtza, Mekong Valley, November; Hofuping Mountains, Mekong Valley, November.

This series exhibits two phases of plumage. A dark phase, somewhat resembling *Sitta s. sinensis* below but not near so dark, and a light phase somewhat resembling *Sitta nagaensis* below but somewhat darker. The light phase were all taken April and May; the dark phase in late summer and fall (one in May), so fading is probably the cause. The dark phase resembles *Sitta s. sinensis* but is much lighter below, but a darker, clearer gray on the back and the bill (in the skin) bluish at the base instead of yellowish.

186. *SITTA YUNNANENSIS* Grant

*Sitta yunnanensis* GRANT, Bull. Brit. Orn. Club, vol. 10, 1900, p. 37 (Weiyuan, S. Yunnan).

A fair series of adults and immature: Kanhoten, Nanchu Plain, March 29, and various stations in the Likiang Mountains, 10,000–11,000 feet, early April to July.

In pine forests.

Besides the differential characters given by the original describer, all the adults have a narrow whitish superciliary line more or less distinct and the white on the outer tail feathers reduced to almost the vanishing point.

One immature female, taken May 24, and about size of the adult or only a trifle smaller, has the black line on the side of the neck reduced to only an indication of neutral gray on the ear coverts, and the superciliary is barely indicated by a little lighter gray than the pileum; the bill is considerably shorter than in the adult.

This is a very distinct species, apparently not closely related to any other Chinese form.

187. *SITTA MAGNA* Ramsay

*Sitta magna* RAMSAY, Proc. Zool. Soc. Lond., 1876, p. 677 (Karennee).

One adult, between Dyinaloko and Bayiwua, 11,000 feet, May 2; one adult, near Bayiwua, 10,000 feet, May 2; and one adult male, Likiang forests, 8,200 feet, August.

Family CERTHIIDAE. Creepers

188. *CERTHIA FAMILIARIS KHAMENSIS* Bianchi

*Certhia khamensis* BIANCHI, Sharpe's Handl. Birds, vol. 4. 1903. pp. 355, 360 (Kansu; Szechwan; S. E. Tibet).

Two males, Likiang Mountains, 12,000 feet, April 9; two males, mountains near Yangtza, Mekong Valley, November; one male, Hofuping Mountains, Mekong Valley, November.

189. *TICHODROMA MURARIA* (Linnaeus)

*Certhia muraria* LINNAEUS, Sys. Nat., ed. 12. 1766, p. 184 (South Europe).

One male, Kangpu Mountains, Mekong Valley, October; one male, mountains near Yangtza, Mekong Valley, November; one female, Youngning Plain, 9,600 feet, February.

While the United States National Museum contains quite a series of this species from Asia, it only possesses a pair from Europe. These two are lighter and have longer bills than any in the Asiatic series, and it may eventually be necessary to recognize an eastern and western race.

Family ZOSTEROPIDAE. Silver-eyes

190. *ZOSTEROPS PALPEBROSA SIMPLEX* Swinhoe

*Zosterops simplex* SWINHOE, Ibis, 1861, p. 331 (Amoy).

Three males and two females, Likiang Mountains, 8,500–9,000 feet, May and August; one male, Likiang Plain, 8,200 feet, August.

This series agrees with birds from Fukien.



## 191. ZOSTEROPS PALPEBROSA PALPEBROSA (Temminck)

*Sylvia palpebrosa* TEMMINCK, Pl. Col., pl. 293, fig. 3, 1924 (Bengal).

One female, between Kantingai and Muanglei, Salween Valley, March 15; one male and two females, between Yünlung and Tanten, March 23; one male, without locality or date.

The birds in this series are smaller and much darker, both above and below, than the series identified above as *simplex*, and represent evidently a well-marked form, but what name to use for it is rather difficult to determine. *Zosterops mussoti* Oustalet,<sup>45</sup> Rothschild<sup>46</sup> says is only a synonym of *simplex*; *Zosterops setschuana* Reichenow<sup>47</sup> is evidently only a renaming of *Zosterops mussoti*, having the same type locality. Even if *mussoti* should prove separable, the present form can not well be it, for the series I have identified as *simplex* would come in between. Most likely it belongs to one of the Burma forms, as it comes from near the western border of Yunnan, and the series agrees better with Indian specimens than with those from further east in China, but my series of Indian birds is unsatisfactory. Most of the Indian specimens are brighter, but there are one or two that match west Yunnan birds very well; they are without definite localities, however.

## Family DICAIEIDAE. Flower-peckers

## 192. DICAENUM IGNIPECTUS IGNIPECTUS (Blyth)

*Myzanthus ignipectus* BLYTH, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 983 (Nepal and Bhutan).

One male and one female, between Tuinakou and Likiang, 8,300–9,000 feet, May 18; one male, between Yulo and Ngulukou, west slopes of Likiang Mountains, May 24.

## 193. PACHYGLOSSA MELANOZANTHA Blyth

*Pachyglossa melanozantha* BLYTH, Journ. Asiatic Soc. Bengal, vol. 12, 1843, p. 1010 (Nepal).

A fine series of adults from various stations in the Likiang Mountains, 13,000 feet, May–July.

## Family NECTARINIIDAE. Sun Birds

## 194. AETHOPYGA DABRYII DABRYII (Verreaux)

*Nectarinia dabryii* VERREAUX, Rev. et Mag. Zool., 1867, p. 173, pl. 15 (Szechwan).

A good series of adult males and females between Failungchiao and Yünlung, March 21; Likiang Mountains (various stations), 9,000–12,000 feet, April–July.

<sup>45</sup> Ann. Sci. Nat. (Zool.), ser. 7, vol. 12, 1891, p. 289.

<sup>46</sup> Nov. Zool., vol. 28, 1921, p. 57.

<sup>47</sup> Journ. f. Orn., 1915, p. 125.

Two males from Hupeh are a duller less brilliant red on the backs and chest, the rump and belly a lighter yellow, the middle tail feathers more of a violet purple than any in the Yunnan series; the Hupeh birds also have smaller bills and shorter tails. I have named the Hupeh race *Aethopyga dabryii bangsi*.<sup>48</sup>

195. *AETHOPYGA NIPALENSIS* (Hodgson)

*Cinnyris nipalensis* HODGSON, Ind. Rev., vol. 2, 1837, p. 273 (Nepal).

One male, Hsuehshanting, 9,000 feet, March 13.

Family MOTACILLIDAE. Wagtails and Pipits

196. *MOTACILLA ALBA HODGSONI* Blyth

*Motacilla hodgsoni* BLYTH, Ibis, 1865, p. 49 (Nepal and Sikkim).

A fair series of adults and immatures from: Tsaochiang, March 18; Yünlung, March 22; Likiang Mountains, 9,400–10,000 feet, April 10–August; Likiang Plain, August; between Likiang and Ganhaitze, 10,000 feet, May 19; Chienchuan, 8,000 feet, June 5.

A small series from Kashmir with which the above specimens have been compared have more white in the wing, especially to the outer margins of the flight feathers; specimens from western Szechwan agree with Yunnan birds. •

197. *MOTACILLA ALBA LEUCOPSIS* Gould

*Motacilla leucopsis* GOULD, Proc. Zool. Soc. Lond., 1837, p. 78 (India).

One female, Likiang Plain, 8,200 feet, August; one female, Likiang Mountains, 9,000 feet, September.

198. *MOTACILLA ALBA BAICALENSIS* Swinhoe

*Motacilla baicalensis* SWINHOE, Proc. Zool. Soc. Lond., 1871, p. 363 (Eastern Asia).

One male, Likiang Mountains, 9,000 feet, September; one female, plain of Youngning, February.

199. *MOTACILLA CINEREA CASPICA* (S. G. Gmelin)

*Parus caspicus* S. G. GMELIN, Reise durch Russland, vol. 3, 1774, p. 104, pl. 20, fig. 2 (Enzeli, Caspian Sea).

Four males and two females, Likiang Mountains, 8,500–9,800 feet, April 29, August, and September; one male, Tseh Chung Mountains, Mekong Valley, November; one female, without further data.

200. *BUDYTES FLAVA SIMILLIMA* (Hartert)

*Motacilla flava simillima* HARTEERT, Vögel paläarkt. Fauna, vol. 3, Heft 3, 1905, p. 289; Nov. Zool., vol. 26, 1919, p. 167 (Sula Id.).

Two males and one female, Likiang Mountains, 8,500 feet, August.

<sup>48</sup> Proc. Biol. Soc., Wash., vol. 38, 1925, p. 11.

## 201. ANTHUS HODGSONI YUNNANENSIS Uchida and Kureda

*Anthus maculatus yunnanensis* UCHIDA and KURODA, Annot. Zool. Jap., vol. 2, 1916, p. 134 (Mengtze, Yunnan).

Four males and four females, Likiang Mountains, 11,000–13,000 feet, April 17–September; one female, near Lanping, May 30; one male, mountains near Yangtza, Mekong Valley, November; one female, Hofuping Mountains, Mekong Valley, November.

The above series, when compared with birds from Kamchatka, eastern China, and Japan in the same stage of plumage, average more heavily streaked above, especially on the head; there appears to be no appreciable difference in size. While the United States National Museum contains a large series of this species, most of the specimens were taken on migration and are hardly comparable. Breeding birds are quite grayish on the back, the olive wash of fall birds almost or quite disappearing by fading. Even so, the fall Yunnan birds have more yellowish in the olive of the back and are more heavily streaked above.

Two female specimens from Kansu, taken in May, have been prepared with plaster which makes the plumage appear lighter than it otherwise would; making allowances for this, they appear to agree with northern and eastern birds.

*Anthus hodgsoni* Richmond<sup>49</sup> is a substitute name for *Pipastes maculatus* Jerdon,<sup>50</sup> preoccupied, and naturally has the same type locality (India). Jerdon's type was a migrant bird; it may prove the same as the Yunnan race, in which case *Anthus hodgsoni berzowskii* Sarudny<sup>51</sup> would be available for the northern form.

## 202. ANTHUS ROSEATUS Blyth

*Anthus roseatus* BLYTH, Journ. As. Soc. Bengal. vol. 16, 1847, p. 437 (Nepal).

One male and one female, Likiang Mountains, April 22 (12,000 feet) and August.

## Family ALAUDIDAE. Larks

## 203. ALAUDA GULGULA COELIVOX Swinhoe

*Alauda coelivox* SWINHOE, Zoologist, 1859, p. 6724 (Amoy).

One male, one female, and one unsexed, Likiang Mountains, 9,500–10,000 feet, April 7–23; one unsexed, Likiang Plain, 9,000 feet, April 14.

<sup>49</sup> Blackwelder, Research. in China, vol. 1, pt. 2, 1907, p. 493.

<sup>50</sup> Birds, India, vol. 3, 1864, p. 873.

<sup>51</sup> Orn. Monatsb., 1909, p. 41.

## Family FRINGILLIDAE. Sparrows

204. *EOPHONA MIGRATORIA MIGRATORIA* Hartert

*Eophona melanura migratoria* HARTERT, Vögel paläark. Fauna, vol. 1, Heft 1, 1903, p. 59 (Sidimi).

An immature male (acquiring the first winter plumage, marked female), Likiang Mountains, 9,500 feet, September.

205. *MYCEROBAS MELANOXANTHUS* (Hodgson)

*Coccothraustes melanoxanthus* HODGSON, Asiat. Res., vol. 9, 1836, p. 150 (Himalayas).

One adult male, four immature males, and one female, Likiang Mountains, 11,000–14,000 feet, July; one female, Lameko Mountain, north of Lashipa, July.

The only specimens available for comparison are an adult male from India without definite locality and a female from Darjiling. The adult male is old and somewhat faded. It has a larger bill, a larger white wing speculum, the white markings on the secondaries and secondary coverts more extensive, the back a browner black, and the breast a lighter yellow than the Yunnan male, the last two characters probably due to the age of the specimen. The Indian female has also a larger bill, is browner on the back, and lighter below than the Yunnan female; the white markings on the wing are no greater, however. It is probable the Chinese bird represents a distinct form, but more material is needed before deciding this point.

206. *MYCEROBAS CARNIPES* (Hodgson)

*Coccothraustes carnipis* HODGSON, Asiat. Res., vol. 9, 1836, p. 151 (Nepal).

One male, Likiang Mountains, July; one male and two females, Hofuping Mountains, Mekong Valley, November; two males and one female, forests of Mili, 12,000 feet, southwest Szechwan, February.

207. *PERISSOSPIZA ICTEROIDES AFFINIS* (Blyth)

*Hesperiphona affinis* BLYTH, Journ. Asiatic Soc. Bengal, vol. 24, 1855, p. 179 (Sikkim).

Two adult males and two adult females, Likiang Mountains, 12,500–13,000 feet, May–July.

208. *PROCARDUELIS RUBESCENS SATURATIO* Rothschild

*Procarduelis rubescens saturatio* ROTHSCHILD, Bull. Brit. Orn. Club, vol. 43, 1922, p. 12 (Sheweli-Salwin Divide).

One adult male and five adult females, Likiang Mountains, 11,000–12,000 feet, June.

209. *PROCARDUELIS NIPALENSIS INTENSICOLOR* Baker

*Procarduelis nipalensis intensicolor* BAKER, Bull. Brit. Orn. Club, vol. 45, 1925, p. 92 (Mekong-Salwin Divide, Yunnan).

One male and four females, Likiang Mountains, 10,000 feet, June-September.

210. *SPINUS AMBIGUUS* (Oustalet)

*Chrysomitris ambigua* OUSTALET, Bull. Mus. Paris, vol. 2, 1896, p. 186 (Yunnan).

One female, Chin Chou and Feilung Chiao, Mekong Valley, March 20; seven adults (five males and two females), Likiang Mountains, 10,000-12,000 feet, May 12-June; one male, Yangtze Gorge near Yulo, 7,400 feet, May 20; one female, Lashipa Plain, 8,600 feet, May 27; one immature male, Limestone Range, east of the Likiang Mountains, 10,000 feet, July 2; one male, mountains near Yangtza, Mekong Valley, November; one male, without definite data.

The male taken in November has the feathers of the lower parts broadly tipped with drab and the yellow subapical streak almost concealed. As the season advances these tips evidently wear off, leaving the lower-parts yellow streaked with warbler green. The feathers of the lower-parts also have a concealed subbasal spot of white.

The males have the cap and sides of face dull black; in the females it is only olivaceous-black (1). The female is generally duller colored, otherwise the sexes are much alike.

The immature male taken July 2, while full size, resembles the adult, except it is light brownish olive above streaked with blackish; below it is a light chalcedony yellow streaked with blackish, the center of the breast and belly becoming more yellowish. It lacks the black cap.

211. *MONTIFRINGILLA NEMORICOLA NEMORICOLA* (Hodgson)

*Fringilauda nemoricola* HODGSON, Asiat. Res., vol. 9, 1836, p. 158 (Nepal).

Two males and two females, Likiang Mountains, 11,000-13,000 feet, April 9-18; three males and one female, Hofuping Mountains, Mekong Valley, November.

The majority of the specimens have the top of the head tawny olive, unstreaked; in one it has faded to isabella color and is being replaced by dark-centered feathers and in another the dark-centered feathers are coming in without much fading in the old feathers. These two specimens were taken in April, but one specimen taken in November has the forehead unstreaked and the occiput streaked. The other two April specimens (male and female) have the crown streaked. According to Sharpe<sup>52</sup> the plain-crowned birds are immature.

<sup>52</sup> Cat. Birds Brit. Mus., vol. 12, 1888, p. 268.



212. *PASSER RUTILANS INTENSIOR* Rothschild

*Passer rutilans intensior* ROTHSCHILD, Bull. Brit. Orn. Club, vol. 43, 1922, p. 11 (Mekong Valley Yunnan).

Eight males and three females from Tengyueh, 5,300 feet, March 7; Yangtze Gorge, 4,600 feet, May 17; between Likiang and Tui-nakou, 9,000 feet, May 18; Likiang Mountains, 10,000–12,000 feet, June and August; Tseh Chung Mountains, November.

213. *HAEMATOSPIZA INDICA* (Gmelin)

*Loxia indica* GMELIN, Sys. Nat., vol. 1, pt. 2, 1789, p. 847 (India).

One female, Likiang Mountains, 11,000 feet, June.

214. *CARPODACUS ERYTHRINUS ROSEATUS* (Hodgson)

*Pyrhulimota roseata* HODGSON, Proc. Zool. Soc. Lond., 1845, p. 36 (Nepal).

Two males, five females, and one immature male, Likiang Mountains, 10,000–13,000 feet, May and June; between Likiang and Tui-nakou, 10,000 feet, May 16.

215. *CARPODACUS THURA FEMININUS* Rippon

*Carpodacus femininus* RIPPON, Bull. Brit. Orn. Club., vol. 19, 1906, p. 31 (Yangtze River, W. Yunnan).

A good series of both sexes, Likiang Mountains, 10,000–15,000 feet, April–August; Bayiwua, east of Likiang Mountains, 11,000 feet, June; near Ndagu, 9,600 feet, Yantze Valley, April 28; Hofuping Mountains, Mekong Valley, November; Lapsshan-Yangtze watershed (Lantiolö), February.

This is not a very well-marked race. Three males from Kansu (the type locality of *Carpodacus dubius* Przewalski) are smaller than our Yunnan birds, but birds from western Szechwan are intermediate. They probably will have to be assigned to the northern form, however.

216. *CARPODACUS PULCHERRIMUS PULCHERRIMUS* (Moore)

*Propasser pulcherrima* MOORE, Proc. Zool. Soc. Lond., 1855, p. 216 (Nepal).

One male and three females, Likiang Mountains, 11,000 feet; April 16–17; one female, Lapsshan-Yangtze watershed (Lantiolö), February.

A small series of males from the mountains of western Szechwan are darker above with a pinkish tinge to the plumage lacking in the single Yunnan male; the latter is also more pinkish, not so reddish below, but the Szechwan birds are breeding specimens. The Szechwan series average smaller. The single male listed above looks very much like the plate of *Propasser waltoni* Sharpe in the Ibis (1906, pl. 16), and may belong to that race. Rothschild,<sup>53</sup> however, with more ample material identifies his specimens as of this race.

<sup>53</sup> Nov. Zool., vol. 30, 1923, p. 55.

217. *CARPODACUS VINACEUS* Verreaux

*Carpodacus vinaceus* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull. 1870, p. 39 (Mountains of Chinese Tibet).

Three females, Likiang Mountains, June and July.

218. *CARPODACUS TRIFASCIATUS* Verreaux

*Carpodacus trifasciatus* VERREAUX, Nouv. Arch. Mus. Paris, vol. 6, Bull. 1870, p. 39 (Mountains of Chinese Tibet).

One fine adult male, Likiang Mountains, 14,000-15,000 feet, April 16.

219. *CARPODACUS RIPPONI* (Sharpe)

*Propasser ripponi* SHARPE, Bull. Brit. Orn. Club, vol. 13, 1902, p. 11 (Gyidzin-shan, W. Yunnan).

Five males and three females, Likiang Mountains, 9,500-12,000 feet, April 23-September; one male, Hofuping Mountains, Mekong Valley, November; one immature unsexed, Tseh Chung Mountains, Mekong Valley, November.

An immature female, an immature male, and the unsexed immature in the above series are darker above, much more brownish below, than the adult female, and the supraauricular stripe is ochraceous, not whitish. The unsexed specimen is particularly dark, but the stripes below are narrower than in the immature marked as a male; it very likely is of the same sex, but slightly older.

220. *PYRRHULA ERITHACA ALTERA* Rippon

*Pyrrhula altera* RIPPON, Bull. Brit. Orn. Club, vol. 19, 1906, p. 19 (Shayang, W. Yunnan).

One male near the Burma border without definite locality, March 25; four males and nine females, Likiang Mountains, 12,000-13,000 feet, May-September.

The male from the Burma border is somewhat smaller, the red below darker and extending up the throat around the black chin spot; it is probably *P. e. erithaca* or an intermediate, but for the present I prefer to list it as above.

An adult male and female recently received from Kansu (120 miles south of Lanchow) are smaller and the female considerably lighter than Yunnan birds; they evidently represent *Pyrrhula erithaca taipaishanensis* Rothschild.<sup>54</sup> The type of *Pyrrhula erithaca wilderi* Riley<sup>55</sup> is darker, especially on the head, and has a smaller bill than the Kansu female.

<sup>54</sup> Nov. Zool., vol. 28, 1921, p. 63.

<sup>55</sup> Proc. Biol. Soc. Wash., vol. 31, 1918, p. 33.

221. *PROPYRRHULA SUBHIMACHALA INTENSIOR* Rothschild

*Propyrrhula subhimachala intensior* ROTHSCHILD, Bull. Brit. Orn. Club, vol. 43, 1922, p. 12 (Likiang Range).

One adult male and one adult female, Likiang Mountains, 13,000–15,000 feet, May 10.

222. *EMBERIZA PUSILLA* Pallas

*Emberiza pusilla* PALLAS, Reise Russ. Reichs, vol. 3, 1776, p. 697 (Daurian Alps).

One adult (not sexed), Huigai, March 11.

223. *EMBERIZA ELEGANS ELEGANTULA* Swinhoe

*Emberiza elegantula* SWINHOE, Proc. Zool. Soc. Lond., 1870, p. 134 (near Kweichow, Hupeh).

One male between Feilung-chiao and Yünlung, March 21; one male, no definite locality, March 26; two males, two females, and two unsexed, Likiang Mountains, 9,400–11,000 feet. May–June; one female, dense forest between Shayang and Nanchu Plain, 9,500 feet, May 30; one male, mountains of Tseh Chung, Mekong Valley, November.

These all belong to one form, apparently. Compared with April specimens of *Emberiza elegans sibirica* Sushkin,<sup>56</sup> from Korea and Chili, the Yunnan series is darker above, especially on the hind neck, where the streaks are black and broad, in one specimen (No. 297507), May 3, almost hiding the slate gray edges to the feathers; the nape more extensively black; the streaks on the flanks blackish rather than russet. In *E. e. sibirica* the hind neck is pale neutral gray, the dark streaks sparse, this difference, without any others, make the two races stand out quite distinctly when viewed from above. I have seen no specimens from Japan. The only specimens available from Hupeh are a winter-taken pair; the male with a smaller wing and tail than the November specimen from Tseh Chung. The latter has darker and broader streaks above; the hind-neck deeper and more extensively gray, and the nape more extensively black. The Hupeh specimens are probably only the northern race.

The National Museum has several breeding birds from Szechwan (Mount Omei, east of Tatsienlu and 25 miles west of Yachow). The Mount Omei specimens are very poor; in fact, the only fair skin is a male from east of Tatsienlu, June 19. It is paler above than the Yunnan series but still much darker than northern birds. A male from Mount Omei and a female from west of Yachow are very dark but very much worn.

<sup>56</sup> Proc. Boston Soc. Nat. Hist., vol. 38, No. 1, 1925, p. 29.

224. *EMBERIZA SPODOCEPHALA MELANOPS* Blyth

*Emberiza melanops* BLYTH, Journ. Asiatic Soc. Bengal, vol. 14, 1845, p. 554 (Tipperah, India).

One male, between Tuinakou, and Likiang, 9,000 feet, May 18; one adult male, Kanhoten, June 3; one immature male, Likiang Plain, 8,200 feet, August 21; one female without locality or date.

225. *EMBERIZA GODLEWSKII YUNNANENSIS* Sharpe

*Emberiza yunnanensis* SHARPE, Bull. Brit. Orn. Club., vol. 13, 1902, p. 12 (Gyi-dzin-shan, W. Yunnan).

A fair series: Between Feilung-chiao and Yünlung, March 21; Likiang Mountains, 9,400–12,000 feet, April 5–May 12; between Likiang and Tuinakou, 10,000 feet, May 16; Yangtze Valley, 4,600 feet, May 17; Likiang Plain, August; mountains above Hungfuping, Mekong Valley, November; Hofuping Mountains, Mekong Valley, November; Yangtze Gorge opposite Fungkou, February.

These are considerably darker and richer colored, both above and below, than the more northern race named *Emberiza cia omissa* Rothschild.

An immature male taken in August is molting into the first winter plumage and is almost or quite as dark as the adult; only a few streaks of the immature dress remain on the throat and chest.

226. *EMBERIZA GODLEWSKII OMISSA* Rothschild

*Emberiza cia omissa* ROTHSCHILD, Nov. Zool., vol. 28, 1921, p. 60 (Si Taipaishan, Tsin-ling Mountains).

One female, Tseh Chung Mountains, Mekong Valley, November; one female, Hofuping Mountains, Mekong Valley, November.

227. *MELOPHUS MELANICTERUS* (Gmelin)

*Fringilla melanicterus* GMELIN, Sys. Nat., vol. 1, pt. 2, 1789, p. 910 (Macao).

One male, marked female, between Kantingai and Muanglai, Salwin Valley, March 15; one male, between Wamangai and Tsao Chiang, March 17.

## Family STURNIDAE. Starlings

228. *SPODIOPSAR CINERACEUS* (Temminck)

*Sturnus cineraceus* TEMMINCK, Pl. Col., pl. 556, 1832 (Japan).

One female, without locality or date.

229. *GRACUPICA NIGRICOLLIS* (Paykull)

*Gracula nigricollis* PAYKULL, Kongl. Vetenskaps Acad. Nya Handlingar, vol. 28, 1807, p. 291, pl. 9 (China).

Two males and one female, Tengyueh, 5,300 feet, March 7.

230. *ACRIDOTHERES TRISTIS* (Linnaeus)

*Paradisca tristis* LINNAEUS, Sys. Nat., ed. 12, 1766, p. 167 (Philippine Islands).

One male, Chienchuan, 8,000 feet, June 5; one male and two females, Likiang Plain, 8,200 feet, August; one male, one female, and one juvenile, Likiang Mountains, 10,000 feet, June and August.

The juvenile is apparently just from the nest and was taken in August.

231. *AETHIOPSAR CRISTATELLUS CRISTATELLUS* (Gmelin)

*Gracula cristatella* GMELIN, Sys. Nat., vol. 1, pt. 1, 1788, p. 65 (China).

One male, Tsao Chiang, March 18.

## Family ORIOLIDAE. Orioles

232. *ORIOLOUS CHINENSIS TENUIROSTRIS* Blyth

*Oriolus tenuirostris* BLYTH, Jour. Asiatic Soc. Bengal, vol. 15, 1846, p. 48 (Central India).

A good series of adults and immatures from Likiang Mountains, 8,500–14,000 feet, April–September; and Limestone Range east of the Likiang Mountains, 10,000 feet, July.

A young bird not long from the nest was taken July 2.

233. *ORIOLOUS TRAILLII TRAILLII* (Vigors)

*Pastor trillii* VIGORS, Proc. Zool. Soc. Lond., 1831, p. 175 (Himalaya, probably Darjiling).

One adult female, Likiang Mountains, June.

When compared with two females from the Himalayas it is not as dark on the head above and lacks the maroon wash to the rump; these differences may be individual or due to age, however, as the two Indian specimens are not alike.

## Family DICRURIDAE. Drongo Shrikes

234. *DICRURUS ATER CATHOECUS* Swinhoe

*Dicrurus cathoecus* SWINHOE, Proc. Zool. Soc. Lond., 1871, p. 377 (China).

One male and three females, Likiang Mountains, 8,200–10,000 feet, April 23, May 15, and September; one female, Chienchuan Plain, June 5.

235. *DICRURUS LEUCOPHAEUS NIGRESCENS* Oates

*Dicrurus nigrescens* OATES, in Hume's Nests and Eggs, ed. 2, vol. 1, 1889, p. 208 (Rangoon).

A good series from: Likiang Mountains, 8,200–10,000 feet, April 5, June–August; Yangtze Gorge near Tsilikiang, 4,600 feet, May 17; between Nguluko and Yulo, Yangtze Valley, May 24; Chienchuan plain, 8,000 feet, June 5.



The only specimen from Assam, a female (*Dicrurus leucophaeus hopwoodi*), available for comparison is a much darker bird both above and below than any in the Yunnan series. Six males in the series have a wing, 143–157 (147.5); and five females, 145–152.5 (148). Bangs<sup>57</sup> assigns three males from the same general region to *Dicrurus leucophaeus nigrescens*, but remarks that they are large birds. Rothschild<sup>58</sup> also assigns specimens from northern Yunnan to this race. The wing is considerably greater than that given by Stuart Baker,<sup>59</sup> however.

### Family CORVIDAE. Crows, Jays, etc.

#### 236. CORVUS MACRORHYNCHOS INTERMEDIUS Adams

*Corvus intermedius* ADAMS, Proc. Zool. Soc. Lond., 1859, p. 171 (Kashmir Dogshai, and Simla).

One adult (unsexed but probably a male), Likiang Mountains, 12,000 feet, April 16: one adult male, Hofuping Mountains, Mekong Valley, November.

These have been compared with five males and four females from Kashmir, and while they have slightly larger bills, 58 against 56–57.5 (56.7), the differences are hardly enough to warrant subspecific separation.

*Corvus macrorhynchos tibetosinensis* Kleinschmidt and Weigold<sup>60</sup> and *Corvus coronoides mengtszensis* La Touche<sup>61</sup> are synonyms.

#### 237. CORVUS CORONE YUNNANENSIS La Touche

*Corvus corone yunnanensis* LA TOUCHE, Bull. Brit. Orn. Club, vol. 43, 1922, p. 43 (Mengtz, S. E. Yunnan).

One adult male, Yangtza, Mekong Valley, November.

#### 238. COLOEUS DAURICUS KHAMENSIS Bianchi

*Coloeus dauricus khamensis* BIANCHI, Bull. Brit. Orn. Club, vol. 16, 1906, p. 68 (Mekong R., Kham, S. E. Tibet).

One male and one female, Kanhoten, March 28; one female, Likiang Mountains, 9,800 feet, May 5; one male, Yangzte Gorge, 4,600 feet, May 17; one male, near Chinho, May 29; one female, without definite data.

#### 239. COLOEUS NEGLECTUS (Schlegel)

*Corvus neglectus* SCHLEGEL, Bijdr. Dierk. Amsterdam, Afl. 8, Corvus, 1859, p. 16 (Japan).

One immature female, Chienchuan, 8,000 feet, June 5; one adult male, Tseh Chung Mountains, Mekong Valley, November.

<sup>57</sup> Bull. Amer. Mus. Nat. Hist., vol. 44, 1921, p. 598.

<sup>58</sup> Nov. Zool., vol. 28, 1921, p. 65; vol. 30, 1923, pp. 57, 266.

<sup>59</sup> Fauna Brit. India, Birds, ed. 2, vol. 2, 1924, p. 361.

<sup>60</sup> Abh. u. Ber. d. Zool. u. Anthr.-Ethn. Mus. Dresden, vol. 15, 1922, p. 2.

<sup>61</sup> Bull. Brit. Orn. Club, vol. 43, 1923, p. 80.

240. *NUCIFRAGA CARYOCATACTES MACELLA* Thayer and Bangs

*Nucifraga hemispila macella* THAYER and BANGS, Bull. Mus. Comp. Zool., vol. 52, 1909, p. 140 (Hsien-shan-hsien, Hupeh).

One male, between Heshwe and Lusuko, 11,000 feet, April 27; one adult unsexed and one immature, Heshwe, 10,000 feet, May 2; eight adults (four males, three females, and one unsexed), and one immature female, Likiang Mountains, 10,000–11,000 feet, May–September.

Two adults from the mountains of western Szechwan agree with the Yunnan series.

Three adults (only one sexed) from the mountains of Shansi are browner, the dark color of the pileum does not extend so far onto the mantle, the spots above and below are slightly heavier than in the Yunnan birds. They represent *Nucifraga hemispila interdictus* Kleinschmidt and Weigold.<sup>62</sup>

Both Bangs<sup>63</sup> and Kleinschmidt and Weigold<sup>64</sup> have relegated *Nucifraga yunnanensis* Ingram<sup>65</sup> to the synonymy of *Nucifraga hemispila macella* Thayer and Bangs.<sup>66</sup>

The two immature specimens referred to above taken May 2 and June have the throats buffy white and the upper and lower parts, except the rump and under tail coverts, heavily spotted with isabella color. The May specimen is considerably younger and has a rather short bill and the spots larger and heavier.

241. *UROCISSA MELANOCEPHALA MELANOCEPHALA* (Latham)

*Coracias melanocephala* LATHAM, Ind. Orn., vol. 1, 1790, p. 173 (China).

Ten adults (five males, three females, and two unsexed), Likiang Mountains, 8,200–11,000 feet, April–June and September; one male, Yangtze Gorge, 7,000 feet, May 22; one male, mountains near Yangtza, Mekong Valley, November; one female, Litang Valley, below Mili, 8,000 feet, February.

The above series when compared with a series from northern and central China averages a much deeper and purer blue on the upper parts, and the tail is considerably longer.

242. *UROCISSA FLAVIROSTRIS FLAVIROSTRIS* (Blyth)

*Ptilorhinus flavirostris* BLYTH, Journ. Asiatic Soc. Bengal, vol. 15, 1846, p. 28 (Darjeeling).

One male, Hofuping Mountains, Mekong Valley, November.

This appears to be the first record of this species from China. The specimen differs widely from four adults from Kashmir (*Urocissa*

<sup>62</sup> Falco, vol. 18, 1922, p. 2; Abh. u. Ber. d. Zool. u. Anthr.-Ethn. Mus. Dresden, vol. 15, 1922, p. 5.

<sup>63</sup> Bull. Amer. Mus. Nat. Hist., vol. 44, 1921, p. 599.

<sup>64</sup> Abh. u. Ber. d. Zool. u. Anthr.-Ethn. Mus. Dresden, vol. 15, 1922, p. 5.

<sup>65</sup> Bull. Brit. Orn. Club, vol. 25, 1910, p. 86.

<sup>66</sup> Bull. Mus. Comp. Zool., vol. 52, 1909, p. 140.

*flavirostris cucullata*. The blue of the wings and tail externally is much darker and more purplish; the back of an entirely different color, dark olive-buff with a dark madder blue sheen, and blue hardly showing in certain lights and the olive-buff almost disappearing in others; the lining of the wings and tail is olive-ocher; tips to the tail feathers, pinkish-buff; and there are other differences.

Sharpe,<sup>67</sup> however, evidently had similar specimens from Kashmir which he considered to be in immature plumages. The above Yunnan specimen appears to be adult, but if not, it would be rather unique for the immature of a species of Corvidae to have a distinctive first winter plumage.

#### 243. GARRULUS BISPECULARIS SINENSIS Swinhoe

*Garrulus sinensis* SWINHOE, Proc. Zool. Soc. Lond., 1863. p. 304 (Canton to Ningpo).

Two males and one female, Likiang Mountains, July; one female, Ashi Road, banks of Yangtze, July; one male, Litiping Mountains, Yangtze Divide, November; one female and one unsexed, Hofuping Mountains, Mekong Valley, November; one male and one female, forests of Mili, southwest Szechwan, February.

This series when compared with Fukien birds averages grayer on the mantle and a little more rufescent on the head. The differences are slight and inconstant, and hardly warrant recognition by name.

#### 244. PYRRHOCORAX PYRRHOCORAX HIMALAYANUS (Gould)

*Fregilus himalayanus* GOULD, Proc. Zool. Soc. Lond., 1862, p. 125 (Himalayas).

Three adult males and four unsexed adults, Likiang Mountains, 9,800–11,000 feet, April, August, and September.

The United States National Museum contains a good series of the chough from western Szechwan, a small series from Kansu and Inner Mongolia, a small series from Kashmir, but few from Europe.

The series from Yunnan and western Szechwan seem to be the same and are uniformly larger with much larger bills than the European bird. Kansu and Inner Mongolian specimens are smaller with smaller bills than Yunnan birds and belong to *Pyrrhocorax p. brachypus* Swinhoe.

The Kashmir bird is smaller than *P. p. himalayanus*, but somewhat larger than Kansu specimens, the differences are slight and for the present they may be assigned to *Pyrrhocorax p. brachypus* rather than *Pyrrhocorax p. pyrrhocorax*, which is a somewhat smaller race.

<sup>67</sup> Cat. Birds Brit. Mus., vol. 3, 1877, p. 73.

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